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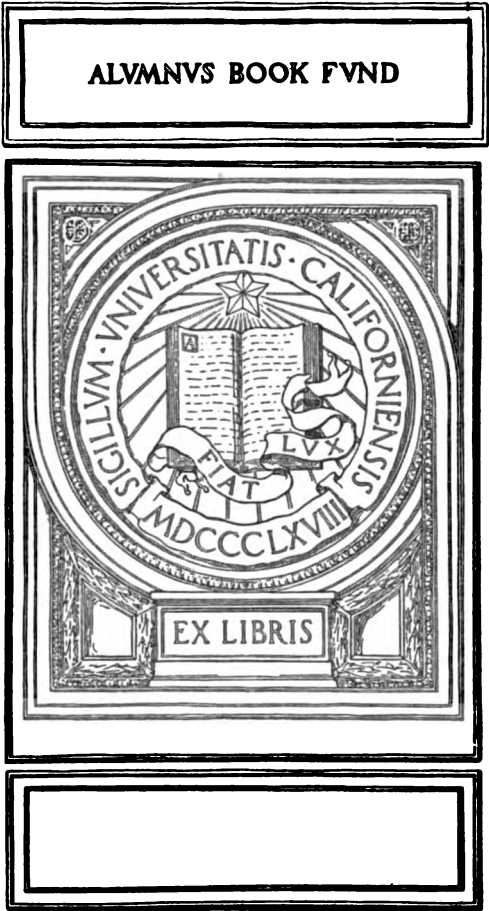
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BOOK-KEEPING

AND

ACCOUNTANTSHIP,

ELEMENTARY AND PRACTICAL.

IN TWO PARTS.

WITH

A KEY FOR TEACHERS.

THE ELEMENTARY PART PRESENTING ITS PRINCIPLES IN AN EASY, CLEAR, AND
DEMONSTRATIVE ORDER, IN STRICT CONFORMITY TO THE RECOGNISED
PRINCIPLES OF TEACHING, AS MANIFESTED IN OUR MOST
POPULAR SCHOOL BOOKS.

THE WHOLE BEING ADAPTED TO

SCHOOLS, SELF-INSTRUCTION, OR COUNTING-HOUSE REFERENCE.

BY THOMAS JONES,

ACCOUNTANT,

Principal of the Initiatory Counting-Rooms, 257 Broadway.

PART I.

NEW YORK:

JOHN WILEY, 161 BROADWAY.

1849.

ENTERED, according to Act of Congress, in the year 1849, by

THOMAS JONES,

In the Clerk's Office of the District Court for the Southern District of New York.

**R. CRAIGHEAD, PRINTER AND STEREOTYPE,
112 FULTON STREET, NEW YORK.**

HF 5633

J6

1849

P R E F A C E .

THE design of the present work is to teach, by the shortest possible process, such parts of the subject of Book-keeping and Accountantship as are difficult to be mastered without a regular course of study, as Grammar, Arithmetic, or any other science.

Great care has been taken to avoid wasting the pupil's energies on mere matters of detail, which require no teaching; every part of the process involves something important for the man of business to know, and which it would be almost impossible to acquire without previous study.

It is generally conceded that the best school-book is the one which presents the exercises of the student according to the most logical arrangement of its elementary principles. When the first exercise prepares the learner to understand the second, and the first and second are required to understand the third, and so on, until the subject is exhausted, teaching can go no further—the rest is the legitimate work of the student. There are, in fact, two very distinct methods of treating a subject: the one by taking a certain amount of detail, and explaining it by reference to such principles as may happen to be involved; the other, by analysing the whole subject, and giving such detail as is necessary to illustrate and enforce every principle. In the one case, principles are given to meet only part of the detail; in the other, the detail is selected to enforce all the principles. The superiority of the latter method need not be insisted upon,—the experienced teacher will recognise it as the great feature of those improvements which distinguish our school-books from those of the last century. The value of an exercise is not to be estimated by the probability of the question arising in exactly the same form in practice, but in proportion as it serves to render familiar some principle of general value that applies as well to a thousand cases. We thus educate the intellect instead of encumbering the mind with useless lumber of detail, which is too often mistaken for knowledge.

The course of instruction here laid down is in all its main features the same as appears in "The Principles and Practice of Book-keeping," a former work of the author. Those who have watched the progress of other school-books will not be surprised at the alterations experience has suggested. A change so radical could scarcely be expected to be carried out at once in all its details—the very assumption of such self-sufficiency on the part of an author ought to destroy his claim to confidence. The advancement of every branch has been progressive; and long as the author has laboured to produce something as perfect as possible, he is

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warned by past experience to expect that much may yet remain to be done. When he first proposed to begin by teaching the principles of the Ledger, he was treated like many others who have dared to point out a gross popular error ; but a short period only elapsed, however, before books on this subject began to multiply. Since the "Principles and Practice of Book-keeping" was published, there have been more new books on the subject than had previously appeared in half a century, and the whole have insisted more or less on the propriety of teaching the principles of the Ledger as a groundwork ; but not one of these authors except Mr. B. F. Foster had the candour to acknowledge with whom the plan originated. Had they used more judiciously what they so unceremoniously appropriated, other notice might have been deemed requisite ; but associating them, as they have done, with a hodge-podge of incongruous and conflicting matter, any more particular notice which may recognise the claim of such books to any rivalry with this could have no other tendency than to destroy both. The too prevalent system of Book-making by compilation makes it dangerous for any author to claim his own, lest the public should attribute to him more than he would feel honoured in owning.

Book-keeping appears to have been much overlooked as a branch of education. Few teachers, even among those best acquainted with the theory of teaching, seem to take sufficient interest in the subject to inquire whether the text-book offered for their use has been prepared with any design of teaching the subject progressively. An arithmetic that presented the exercises in the order in which questions would be likely to arise in business would be pronounced at once the extreme of absurdity ; those least experienced in teaching would see the necessity of reducing it to some order before the pupil could take it up with any prospect of success, and yet the subject of Book-keeping is given to the pupil without any arrangement of the exercises. He is plunged at once into the Journal, and expected to take it up precisely as though he had been twenty years in practice. In every step of his progress the teacher must be at his elbow to explain. The pupil is, in fact, only attempting to get *crammèd* with a certain amount of entries which he scarcely hopes to understand, but vainly expects that the variety he has dealt with will furnish sufficient examples for future reference. The same process applied to any other common branch of education would receive no countenance whatever.

To obviate these defects, and render every step of the pupil's progress easy and certain, is the aim of this work. It has grown out of fifteen years' constant study and practice in this particular branch of teaching, has been uniformly successful in its results, and the author offers it in the most perfect confidence that the student who performs faithfully the exercises given, will acquire a knowledge of the subject such as is seldom attained even by the experienced accountant.

New York, July 2d, 1849.

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- P L A N O F T H E W O R K .

PART I. is divided into 12 sections for convenience of reference, each section except the first embracing an appropriate series of questions for exercise, such as, when performed, must furnish satisfactory proof that the student thoroughly understands the principles involved. A great feature of the work is, that the student has no access to anything from which he can copy his exercise. All Journal entries and answers are given in the Key only.

SEC. I. is an exemplification of a full set of accounts, embracing in very brief space the Day Book, Cash Book, Invoice Book, Sales Book, Journal, and Ledger.

SEC. II. is an analysis of the arrangement exhibited in Sec. I., showing the design and object of all the different accounts, and enabling the student to draw up a full statement of the position of affairs from any set of books whatever.

SEC. III. is designed to teach the compilation or reconstruction of what has been previously analysed and mastered as a plan of arrangement, in which the student posts up a set of books from the Cash Book, Invoice Book, Sales Book, and Day Book, without journalizing, thereby giving full proof of his knowledge of the objects of the different accounts, and at the same time mastering a system in very general practice.

SEC. IV. introduces the Journal, Trial Balances, Posting, Balancing and Re-opening, with Commission business, divided into a series of exercises.

SEC. V. introduces the Cash Book, with the process of Journalizing the Cash monthly.

SEC. VI. to XI. embrace a course of Commercial Arithmetic, comprising such instruction as is generally useful in connexion with the business transactions of this work. Short methods are given of computing Interest and Exchange, of Equating Payments, and drawing up foreign Accounts Current, of calculating Compound Interest and Annuities.*

SEC. XII. explains the Settlement and Liquidation of Partnerships, and the manner of carrying on Old and New Books in connexion, with exercises and a short explanation of Single Entry.

PART II. embraces the more complicated operations of Foreign Shipping and Commission Business, with the Accounts Current, and all calculations connected therewith. In addition to the Journal given in the Key are explanations of the most difficult Journal Entries, for the use of those who attempt self-instruction. The first and second parts, with the Key, are bound together in one volume, for the use of Teachers or those who desire to instruct themselves.

The Ledgers of the different sets given for exercise have been considered useless. As the Teacher's Key contains the Journal and Trial Balances, every exercise can be tested with the utmost facility, and what would otherwise have formed some twenty or more pages of entirely useless Ledger work, is filled with important matter.

Blank Books may also be had with the work, properly prepared for the several exercises, and comprising the necessary directions.

* The author had no design of making a substitute for any of the Arithmetics in use, but to offer only such instruction as he has commonly found it necessary to give.

DEFINITIONS.

NOTES AND ACCEPTANCES.

WHEN business is transacted on credit, merchants for the most part circulate what is termed their own paper, for example :—If I buy goods from A. at two months' credit, or in any other way become indebted to him, A., instead of allowing me to remain his debtor for the term of credit agreed upon, takes my note for the amount, as follows :—

\$200.00	NEW YORK, JANUARY 1ST, 1849.
Two months after date, I promise to pay to A. or order the sum of two hundred dollars, for value received.	
	THOMAS JONES.

Or, which is the same thing in effect but different in form, he may take my Acceptance, in which case he writes the document himself, and addresses it to me, thus :—

\$200.00	NEW YORK, JANUARY 1ST, 1849.
Two months after date, pay to my order the sum of two hundred dollars, for value received.	
To MR. THOMAS JONES New York.	A.

Or, if A. reside at a distance, the draft may be presented to me for acceptance by a third party, to whom A. is himself indebted, and then A. would write, "Pay to B. or order." In this case, an acceptance is said to be in B.'s favour.

In order to render the draft negotiable, it is now necessary that I accept it by writing across its face the word "Accepted," and affixing my signature. I then resign it to the person in whose favour it is drawn.

Hence, the difference of these two forms is, that when I give my note, I in effect voluntarily say I will pay ; and when I give my acceptance, I give an affirmative answer to the drawer, who says, will you pay ?

My Notes and Acceptances are called Bills Payable, as I must provide for them at maturity. And, as other men's Notes and Acceptances must pass through my hands in the course of business, I distinguish them by the term "Bills Receivable," as I have to receive their amount at maturity.

These Notes and Acceptances are used by merchants in the place of money, but subject to a discount in proportion to the time they have to run.

Thus, suppose I take A.'s note for \$1,000 to the City Bank, the said Note having thirty days to run, provided the responsibility of A. and myself be satisfactory, I shall, on delivering up the Note, receive in Cash

Allowing a discount of	\$994.17
	5.83

\$1,000.00

PART I.

SECTION I.

EXEMPLIFICATION.

BOOK-KEEPING implies a systematic arrangement of mercantile transactions, the purpose of which is to afford at all times ready access to the Resources and Liabilities of the party whose operations are recorded, thus :

RESOURCES.		LIABILITIES.	
<i>Cash</i>	5,850	<i>Bills Payable, outstanding</i>	3,000
<i>Bills Receivable</i>	3,800	<i>I owe James Blackwell</i>	1,000
<i>George Irving owes</i>	1,000	<i>Total Resources,</i>	11,150
<i>Ira Perego</i> "	500	<i>" Liabilities,</i>	4,000
		<i>My present worth is</i>	7,150
	<u>\$11,150</u>		<u>\$11,150</u>

Each particular item of the above forms the subject of an "*account*" (see definitions); thus there is one account of Cash, another account of Bills Receivable, another of Bills Payable, another for James Blackwell; so that the statement of Resources and Liabilities can at any time be drawn up by reference to the book of accounts called the Ledger, and the whole art of Book-keeping is merged in the peculiar arrangement of this book.

There are but two methods of Book-keeping in use, the one called Single, and the other Double Entry.

Single Entry affords only the above statement; but when accounts have been arranged by Double Entry, they enable us, by additional accounts, to draw up another statement, viz. of the Profits and Losses resulting from the same operations, for example :—

LOSSES.		PROFITS.	
<i>On Railroad Stock</i>	850	<i>On Merchandise</i>	1,950
<i>Business Expenses</i>	579	<i>" Bank Stock</i>	500
<i>Total Gain</i>	2,579	<i>" Exchange</i>	129
<i>Total Loss</i>	<u>1,429</u>		
<i>Net Profit</i>	1,150		
	<u>\$2,579</u>		<u>\$2,579</u>

Capital at commencement	.	.	.	.	6,000
Net Profit	.	.	.	.	1,150
Present worth	.	.	.	.	<u>\$7,150</u>

SEC. I.—EXEMPLIFICATION.

Hence Double Entry embraces particular accounts of "Rail R. Stock," "Merchandise," &c., so as to furnish each item in the latter statement, thus developing the present worth from two distinct sources, the one corroborating the other, and constituting what is called a balance of the books.

The grand problem then presented in Book-keeping for our analysis is its plan of arrangement; and this plan, so far as its essential or general features are considered in the system of Double Entry, has remained unaltered since its first promulgation as the Italian method.

The manner of recording transactions before they are arranged in the Ledger varies in almost every different business, but this variation presents no difficulty whatever when the different accounts of the Ledger are understood, inasmuch as they are mere expedients to save time, which common sense will dictate to all who understand what they are aiming to accomplish,—for example: Every Ledger imposes upon us the necessity of collecting together all Cash receipts, so as to show the total amount received during the year. Now, if Cash receipts were first recorded on a Day Book indiscriminately with other transactions, they must be separated again, and copied (*posted*) into the Ledger singly, perhaps making thirty or more items to be posted every day—but let all these Cash receipts be omitted on the Day Book, and recorded only on a book called the Cash Book, the total amount received can be added every month, and passed to the Ledger in one sum, making only twelve sums to carry into the Ledger instead of several thousands. The Ledger, then, has a fixed and unalterable plan; the subordinate books are varied in every business with especial reference to that plan. With a full knowledge of the Ledger, the subordinate modifications will be appreciated in proportion as they save time and labor; but, to those ignorant of the Ledger, every set of books appears a different system.

In modern practice it is common to have four principal books, into which the original entries of transactions are distributed, viz:—

The *Cash Book*, on which are entered all transactions of receiving or paying Cash.

The *Invoice Book*, on which are entered all transactions of buying Merchandise.

The *Sales Book*, on which are entered all transactions of selling Merchandise.

The *Day Book*, on which are entered all transactions for which no particular book is provided.

From these books the Journal and Ledger are compiled, and it is this process of compilation or arrangement that constitutes the art and science of Book-keeping.

The *Journal* is used to digest and prepare the matter of the foregoing books, in conformity to the plan of the Ledger; a knowledge of the latter book is, therefore, indispensable in undertaking the compilation of the Journal.

The *Ledger* is the grand book of accounts, in which is carried out the particular objects of all the other books: here the whole arrangement is completed which furnishes the statement of Resources, Liabilities, Gains, and Losses.

In addition to these principal books, which include every transaction that takes place, there are other books used to record *details*; for example, although the notes Receivable and Payable are entered with the Invoices, Sales, &c., it is necessary to have a convenient record of their dates, when due, and other particulars, and for this purpose the Bill Book is kept. It would be idle to attempt to particularize all the Mem. Books of this nature that merchants require: each devises for his own purposes.

We shall now proceed to exemplify all the books composing the set enumerated, the Journal and Ledger being complete; but the Invoice Book, Sales Book, Cash Book, and Day Book, are specimens only of their forms. To exemplify the details in full for three months' business would occupy too much space, without answering any useful purpose, as there is nothing to be learnt from their continuation.

This exemplification, however, must be looked upon only as the subject to be explained by the exercises in the two following sections; the analysis presented in Section II. will render the whole arrangement of the Ledger clear and simple, and the exercises in compilation in Section III. will give the master-key to the Journal; but, without this, the whole process will appear mysterious and complicated.

DAY BOOK.

NEW YORK, JANUARY 1st, 1848.

I have this day taken a statement of my Resources and Liabilities, in accordance with which I make the following entry :—

Sundries to Sundries.

<i>Cash</i> for this amt. on hand	5,857.13
<i>Bills Receivable</i> for this amt. of notes on hand	3,827.36
<i>John Wilson</i> owes me on acct.	1,875.80
<i>Bank Stock</i> for 70 Shares in Eagle Bank	7,000.00
<i>Merchandise</i> for this amt. at present value	3,500.00

Total Resources . . . \$22,060.29

<i>To Bills Payable</i> for my notes outstanding	5,843	24
“ <i>William Brown</i> for this amt. I owe him	1,575	23
“ <i>Stock</i> for my net Capital	14,641	82
	\$22,060	29

10th

William Brown to Bills Payable

For my note @ 30 days, due 10th Feb'y 500 00

18th

Bills Receivable to John Wilson

Rec'd his note dated 15th @ 2 mos. 800 00

20th

John Wilson to Charges

For Cartage	3.50	
“ Labour	3.50	
“ Postages	1.00	8 00

The foregoing transactions, it will be perceived, are such only as could not be entered on the Invoice Book, Sales Book, or Cash Book. In most cases it is considered waste of time to enter such transactions on this book as already appear on the books named, from whence they can be copied into the Journal as readily as if they appeared here. The note given to William Brown could not be entered on the Invoice Book, because we designed keeping an open account with him ; so on the Invoice Book we made an entry merely to credit him with the goods—and now the entry on the Day Book charges him with the note. But, in other cases, where we did not wish an open account on the Ledger with the parties from whom we bought, we recorded the note given on the Invoice Book, so that no Ledger account may be opened with the sellers of the goods.

These observations are not for the beginner ; they will be appreciated when he has mastered Sec. III. The whole of this section is a mere exemplification of the subject to be taught, on the same principle that we would first show the picture or model of a complicated machine, and then proceed to explain the relation of the several parts to the whole.

SEC. I.—EXEMPLIFICATION.

Dr.		CASH.	
Jan.	1 To Balance	Amt. on hand	5,857 13
	3 " John Wilson	Rec'd on account	350 00
	8 " Merchandise	Sold James Black	913 48
	15 " Bills Receivable	John W. Whalley's note	1,500 00
	18 " Merchandise	Sold John Bedell	936 52
	24 " Bills Receivable	Richard B. Clifford's note	1,000 00
			10,557 13
Feb.	1 To Balance	Brought down	6,998 08
	2 " John Wilson	Received on account	800 00
The above exemplifies the manner of recording Cash transactions during one month, with the commencement of the next. It will be understood by the student when he has arrived at Exercise I, Section III.			
INVOICE BOOK.			
New York, Jan. 2, 1848.			
Mr. Thomas Jones,			
Bo't of William Brown.			
7318	6 ps. Poul de Soie	345½ yds. 65	224 58
6453	10 " Blk. Silk Velvet	180½ " 200	360 50
46	10 boxes Ribbons	120 ps. 112½	135 00
*734	12 ps. Printed Silk Handkerchiefs	325	39 00
			759 08
		10th	
	Albert R. Raymond,		
†727	One case 25 ps. Super. Blk. Cloth,	561½ yds. @ \$3.60	2,020 50
	Settled by note 8 mos. due Sept. 13th.		
		Carried forward	2,779 58
* No. on each piece.			
† Package No.			

CASH BOOK.

CONTRA.

CR.

Jan.	3	By Charges	Paid for fuel		54 00
	10	" Merchandise	Bo't of Houghton & Arnold		996 74
	12	" Charges	Paid Cartage		32 43
	18	" Bills Payable	" Note of Dec. 15th		874 20
	20	" Merchandise	Bo't of Htn. & Ard.		1,576 50
	25	" Charges	Paid for labour		25 18
	31	" Balance	Carried down		6,998 08
				\$	10,557 13

INVOICE BOOK.

Jan'y 10th.

Bro't forward

2,779 58

Houghton & Arnold,

458	250	Gross Twist Vest Buttons,	18 lines	45	112 50
1354	200	" " Coat "	34 "	125	250 00
1355	200	" " " "	36 "	225	450 00
1870	73	" " Overcoat "	45 "	250	182 50
		Box and Cartage			1 74
		Paid in Cash (see above)			996 74

13th

Albert R. Raymond,

100	Bales Blk. Wadding each 40 dz.,	4,000 dz.	25	1,000 00
50	" White " 40 "	2,000 "	22½	450 00
20	" " " 600 yds.,	12,000 yds.	2	240 00

Settled by note 8 mos. due 16th Sept.

1,690 00

20th

Houghton & Arnold,

64	23	Gross Fancy Back Combs	25.00	575 00
214	25	" " " "	24.00	600 00
875	24	Doz. Shell " "	20.00	280 00
876	5	" " " "	24.00	120 00
		Box and Cartage		1 50
		Paid in Cash		1,576 50

4,460 58

SEC. I.—EXEMPLIFICATION. INVOICE BOOK.

NEW YORK, JANUARY 21ST, 1848.

				Bro't forward			4,469 58
		<i>William Brown,</i>					
4 @ 6	3	Bales Brown Sheeting	^{872 1-3} ⁹⁴⁵ ⁹⁴⁰	2757½ . . . 6 cts.	165 45		
9 " 13	5	" " "	¹⁰⁸¹ ^{1104 1040} ^{1046 1032}	5257 . . . 6½ "	341 71		
24 " 27	4	" " "	^{1014 1004} ^{1104 1078}	4200 . . . 7 "	294 00		
			25th				801 16
		<i>Albert R. Raymond,</i>					
734&5	2	ps. Superfine Blue Cloth, 58½ yds.		\$5.00	272 50		
761&3	2	" " Olive " 61½ "		5.20	318 50		
563&4	2	" " Brown " 75½ "		4.75	358 63		
		Box and Cartage			1 69		
		Settled by note 3 mos., due April 28th.					951 32
			28th				
		<i>Daniel O. Gibb,</i>					
73	1	case 36 in. Super Pongee Hand's,	100 ps.	\$4.25	425 00		
93	1	" 32 " " " " " 100 "		3.12½	312 50		
64	1	" 28 " " " " " 100 "		2.50	250 00		
43	1	" 28 " Com. " " " 100 "		1.75	175 00		
		Settled by note 2mos., March 31.					1,162 50
		Total debit to Merchandise Acct.					\$7,384 56

Above is exemplified an Invoice Book for one month: we say *an* Invoice Book, for the nature of the business determines very much its form and management. Its object is plain enough, viz. to exhibit all particulars of the quantities, qualities, and prices of goods bought, with the names of the sellers, dates, marks, &c. To arrange an invoice judiciously for any kind of business requires some degree of ingenuity and experience, as every different line of business has different particulars to exhibit in relation to the articles dealt in; but the beginner is never at any loss for an example of the form of invoice required, and the document is always of so simple a nature in its objects, that one example is sufficient. The first example is a literal copy of the invoice; but it is generally considered sufficient to enter in the Invoice Book the seller's name, with particulars of the articles and prices. Those goods bought for Cash are not extended in the outer column, as the transaction is also entered on Cash Book. The short extension is intended to remind the Book-keeper that such entries are not to be passed to the Ledger, as they go there by another channel, viz. the Cash Book. This will be fully understood after performing the Exercises in Section III.

SEC. I.—EXEMPLIFICATION. SALES BOOK.

NEW YORK, JANUARY 5TH, 1848.

		Sold. <i>John W. Whalley,</i>				
24 @ 43	20	cases Wht. Spool Cotton,	2000 doz. @ 15 cts.	300	00	
50 " 59	10	" Col'd " "	1000 " " 12½ "	125	00	
	9	50 doz. Hair Brushes	4.50	225	00	
	14	50 " " "	5.00	250	00	
	38	50 " Cloth "	3.25	162	50	
		Received his note 4 mo., due May 8th.				1,062 50
		8th				
		<i>James Black,</i>				
745@749	5	ps. Blue Cloth	74½ @ 3.10	230	95	
435 " 439	5	" Brown "	77 " 3.50	269	50	
381 " 384	4	" Blk. "	62½ " 4.00	249	00	
670 " 672	3	" Olive "	40½ " 4.05	164	03	
		Received in Cash.		\$913	48	
		12th				
		<i>Charles Fletcher,</i>				
213 50	5	ps. ¾ Linen Birdseye Diaper	799 yds 15	119	85	
576 50	5	" ¼ Irish Linen	1300 " 87½	1,137	50	
560 30	3	" " " "	782 " 90	703	80	
		Rec'd his note 6 mo., due July 18th.				1,961 15
		15th				
		<i>John Wilson,</i>				
10	10	half chests Young Hyson, tare 13 lbs. ea.	⁶⁰⁰ ₁₃₀ 560 @ 54	252		
10	10	" " " " tare 13 "	⁷⁰ ₁₃₀ 610 " 55	335	50	
		18th				587 50
		<i>John Bedell,</i>				
2	2	cases Furniture Prints	4086 @ 9½	388	17	
2	2	" Bl'k & Wht. "	2547 " 8	203	76	
2	2	" " "	2364 " 6½	153	66	
2	2	" Fancy "	2727½ " 7	190	93	
		Received in Cash.		936	52	
		20th				
		<i>Thomas Franklin,</i>				
468 14	14	ps. Black Cassimere	295½ @ 1.20	354	60	
469 10	10	" Fancy "	185 " 1.75	323	75	
		Rec'd his note 6 mo., due July 23d.				678 35
		Carried forward				4,289 50

SEC. I.—EXEMPLIFICATION. SALES BOOK.

NEW YORK, JANUARY 24TH, 1848.

				Bro't forward			4,289	50
14	470	10	<i>James Johnston,</i>					
	P 471	8	ps. Blk. Doeskin	176½ @ 185	326	53		
	1734	10	" Super Blue Cloth	251½ @ 390	980	85		
			" Blk. Silk Velvet	168½ @ 425	716	13		
		Rec'd his note 4 mo., due May 27th.					2,023	51
		28th						
		<i>William F. Sands,</i>						
	1735	10	ps. Blk. Silk Velvet	173¼ @ 300	519	75		
	485	5	" Blue " "	85 " 380	323	00		
	763	20	" Gros de Rhine	630¼ " 65	409	98		
		Received his note 3 mo., due May 1.					1,252	73
		Total Cr. to Mdse. Acct.					\$7,565	74
		The same remarks apply to the Sales as to the Invoice Book. The object of short extending the Cash Sales, and not including them in the sum total, will appear in Section III.						

SEC. I.—EXEMPLIFICATION. BILL BOOK.

BILLS RECEIVABLE.

No.	When Received.	On Account of	On Whom Drawn.	Date.	Term.	When Due.	Amount.	When and How Disposed of.	
1	Jan. 5	John W. Whalley	Himself	Jan. 5	4 mo.	May 8	1062.50		
2	" 12	Charles Fletcher	"	" 12	6 "	July 18	1961.15		
3	" 18	Jno. Wilson	"	" 15	2 "	Mar. 18	800.00		
4	" 20	Thomas Franklin	"	" 20	6 "	July 23	678.35		
5	" 24	James Johnston	"	" 24	4 "	May 27	2023.51		
6	" 28	William F. Sands	"	" 28	3 "	May 1	1252.73		

BILLS PAYABLE.

No.	When Accepted.	On Account of	Payable To.	Date.	Term.	When Due.	Amount.	When and How Redeemed.	
1	Jan. 10	William Brown	His Order	Jan. 8	30 days	Feb. 10	500.00		
2	" 10	A. R. Raymond	" "	" 10	8 mo.	Sep. 13	2020.50		
3	" 13	" " "	" "	" 13	8 "	" 16	1690.00		
4	" 25	" " "	" "	" 25	3 "	Apr. 28	951.32		
5	" 28	Daniel O. Gibb	" "	" 28	2 "	Mar. 31	1162.50		

There are other forms of Bill Book. A very general one is to have twelve additional columns, one for each month in the year, to show when each note matures ; so that every date appearing in the column for March, for example, would indicate at a glance what notes matured that month. Forms for Bill Books may be found at any stationer's, and their respective advantages compared ; the above will suffice to show their general purpose.

NOTE.—At each period of balancing, or as often as convenient, it is common to compare the Notes Receivable on hand with those shown in the Bill Book ; but the author of the "North American Accountant" bases the greater part of his pretensions on an improved Bill Book, in which he has a money column for the notes received, and another for those disposed of ; and several times in the year he proposes to re-enter all the notes on hand anew, and balance the old account. Now there can be no doubt that the notes on hand, added to those disposed of, will balance the account, and render an error in Bills Receivable account almost impossible ; indeed, we can scarcely imagine what the next adventurer can offer in the way of improvement, short of keeping two sets of books and two book-keepers. We only wonder he should omit to suggest this at once, since accuracy may be purchased at the trifling expense of making the same entry three or four times over, for this must be the case with merchants who take eight months' paper, and not a few have three or four hundred notes constantly on hand.

The same author, oblivious we must suppose of the law of copyright, claims to have exemplified all modern improvements in the science ; to which he adds certain of his own, viz. re-writing the Bill Book three or four times, putting no cyphers in the cent columns where they represent nothing, and contracting debts in London at 8 per cent. premium and paying them at par, as we shall show hereafter. The author of the "North American Accountant" must be a philosopher. He must surely be deemed a lover of truth who appropriates all he can find in "modern improvements," no matter with whom they originated, and who takes three or four times the ordinary trouble to arrive at it.

SEC. I.—EXEMPLIFICATION.

NEW YORK, JANUARY 1ST, 1848.

Drs.

Crs.

In this column is placed the page of the Ledger on which each account appears.

<i>Sundries to Sundries,</i> For opening the following accounts as per statement of my Resources and Liabilities entered on Day Book.				
<i>Cash</i> for this amount on hand		5,857	13	
<i>Bills Receivable</i> " "		3,827	36	
<i>John Wilson</i> owes me on account		1,875	80	
<i>Bank Stock</i> , for this amount at present value		7,000	00	
<i>Merchandise</i>		3,500	00	
<i>To Bills Payable</i> , my own notes outstanding				5,843 24
" <i>William Brown</i> , I owe him				1,575 23
" <i>Stock</i> , for my net Capital				14,641 82
"				
<i>William Brown</i>	<i>To Bills Payable</i> ,	500	00	
For my note at 30 days.				500 00
"				
<i>Bills Receivable</i>	<i>To John Wilson</i>	800	00	
Received his note at two months.				800 00
"				
<i>John Wilson</i>	<i>To Charges</i>	8	00	
For Cartage, Labour, and Postages.				8 00
"				
<i>Cash to Sundries</i>		4,700	00	
For the following amounts recd. this month, as per Cash Book.				
<i>To John Wilson</i> , on account				350 00
" <i>Merchandise</i> , cash sales				1,850 00
" <i>Bills Receivable</i> , matured				2,500 00

Note.—It has been thought better to omit particular dates in this Exemplification, as well as some other matters of minor detail, the object being to fix the attention on points of more general importance.

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DRS.

CRS.

<i>Sundries to Cash</i>			3,559 05
For the following sums paid this month, as per Cash Book.			
*Charges paid for fuel	54.00		
" " " cartage	32.43		
" " " labour	25.18		
Total debit of charges acct.		111 61	
<i>Merchandise, cash purchases</i>	2,573 24		
<i>Bills Payable, matured</i>	874 20		
"			
<i>Merchandise to Sundries</i>	7,384 56		
For goods purchased this month, as per I. B.			
To <i>William Brown</i> , on account			1,560 24
" <i>Bills Payable</i> , my own notes issued			5,824 32
"			
<i>Sundries to Merchandise</i>			7,565 74
For goods sold this month, as per Sales Book.			
<i>John Wilson</i> , on account	597 50		
<i>Bills Receivable</i> , for notes received	6,978 24		
February.			
<i>Cash to Sundries</i>	4,875 00		
For the following received this month as per C. B.			
To <i>John Wilson</i> , on account			800 00
" <i>Merchandise</i> , cash sales			1,350 00
" <i>Interest</i> , on notes discounted			30 00
" <i>Bank Stock</i> , received dividend			125 00
" <i>Bills Receivable</i> , notes matured			2,570 00
"			
<i>Sundries to Cash</i>			10,626 58
r payments this month as per C. B.			
<i>Merchandise</i> , cash purchases	1,500 00		
<i>Bills Receivable</i> , notes discounted	3,000 00		
<i>Profit & Loss</i> , loss on uncurrent money	3.50		
" " " broken bank bills	25.00	28 50	
<i>Charges</i> , rent of premises	500.00		
Stationer's bill	136.00		
Carpenter's bill	32.78		
Cartage	25.30		
Labour	50.00		
Total debit of Charges Acct.		744 08	
<i>able</i> , my own notes redeemed		5,354 00	

all these payments for charges together the amount is passed
 dger Acct. of Charges, the object being to show on the debit of
 amount of this class of expenditures.

SEC. I.—EXEMPLIFICATION.

NEW YORK, FEBRUARY, 1848.

Drs.

Crs.

<i>Merchandise to Sundries</i>	7,449 89		
For purchases this month, as $\text{\textcircled{P}}$ Invoice Book.			
<i>To Bills Payable</i> , for my notes given		6,124 57	
" <i>John Wilson</i> , on account		1,325 32	
"			
<i>Sundries to Merchandise</i>		11,490 46	
For goods sold this month, as $\text{\textcircled{P}}$ S. B.			
<i>Bills Receivable</i> , this amount of notes received	7,340 22		
<i>William Brown</i> , sold him on account	4,150 24		
"			
<i>Bills Receivable</i>	1,531 55		
<i>To William Brown</i>		1,531 55	
For his acceptance of my draft of this amount.			
"			
<i>John Wilson</i>	791 09		
<i>To Bills Payable</i>		791 09	
For my acceptance of his draft for this amount.			
"			
<i>John Wilson</i>	12 93		
<i>To Charges</i> for cartage . 5.20			
" " " labour . 3.50			
" " " cooperage . 4.23			
"		12 93	
"			
<i>William Brown</i>	16 78		
<i>To Charges</i> for labour . 15.20			
" " " postages . 1.58			
"		16 78	
<i>March.</i>			
<i>Cash to Sundries</i>	12,702 48		
For receipts this month, as $\text{\textcircled{P}}$ Cash Book.			
<i>To Bills Receivable</i> , notes matured . . 3,845.20			
" " " " discounted . . 5,354.00		9,199 20	
" <i>Merchandise</i> , cash sales		2,153 28	
" <i>S. M. Richardson</i> , on account		1,350 00	

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Drs.

Crs.

<i>Sundries to Cash</i>			10,508 43
For payments this month, as $\text{\textcircled{P}}$ Cash Book.			
<i>Bills Payable</i> , my notes matured	7,583 00		
<i>Charges</i> for Clerks' Salaries	300.00		
" " Labour	29.35		
" " Desks & Fixtures	530.28		
" " Cartage	15.27	874 90	
<i>Merchandise</i> " Cash Purchases	584.00		
" " Duties on do.	53.00	637 00	
<i>Profit & Loss</i> " Insurance	135.00		
" " Protest on Note	1.75	136 75	
<i>G. L. Morgan</i> , on Account	1,253 24		
<i>Interest</i> , Discount on Notes	23 54		
"			
<i>Merchandise to Sundries</i>	11,144 00		
For goods purchased this month, as $\text{\textcircled{P}}$ I. B.			
To <i>Bills Payable</i> , for my notes issued		4,230 00	
" <i>Bills Receivable</i> , other men's notes disposed of		3,379 80	
" <i>G. L. Morgan</i> , on credit		3,534 20	
"			
<i>Sundries to Merchandise</i>		10,380 00	
For goods sold this month, as $\text{\textcircled{P}}$ Sales Book.			
<i>S. M. Richardson</i> , on account	4,260 00		
<i>Bills Receivable</i> , for notes received	6,120 00		
"			
<i>Bills Receivable</i>	1,500 00		
To <i>S. M. Richardson</i>		1,500 00	
For his note of this amount.			
"			
<i>Interest</i>	52 40		
To <i>Bills Receivable</i>		52 40	
For this amount allowed as discount on notes passed to Haggerty, Draper & Jones.			
"			
<i>G. L. Morgan</i>	1,800 00		
To <i>Bills Payable</i>		1,800 00	
For my note of this amount.			
"			
<i>Merchandise</i>	6 24		
To <i>S. M. Richardson</i>		6 24	
For deduction on damaged goods.			

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Drs.

Crs.

<i>Profit & Loss</i>	<i>To Bills Receivable</i>	574 33		574 33
For this amount lost on Wm. Brown's note.				
"				
<i>Merchandise</i>	<i>To Profit & Loss</i>	7,324 05		7,324 05
For profit realized on former acct., which is hereby transferred to the latter account.				
"				
<i>Bank Stock</i>	<i>To Profit & Loss</i>	356 75		356 75
For profit on former account.				
"				
<i>Profit & Loss</i>	<i>To Charges</i>	1,692 88		1,692 88
For loss on latter account to date.				
"				
<i>Profit & Loss</i>	<i>To Interest</i>	45 94		45 94
For loss on latter account.				
"				
<i>Profit & Loss</i>	<i>To Stock</i>	5,202 40		5,202 40
For net gain in business transferred to latter account.				

This journal has been represented as made monthly, but a journal made daily would present precisely the same features. Consider the business herein exemplified as that of three days, instead of three months, and you have the exact daily process.

SEC. I.—EXEMPLIFICATION. LEDGER.

Dr.				CASH.				Cr.					
1848				*	1848				*				
Jan.	To Sundries	. . .	5,857 13		Jan.	By Sundries	. . .	3,559 05					
"	"	" . . .	4,700 00		Feb.	"	" . . .	10,626 54					
Feb.	"	" . . .	4,875 00		Mar.	"	" . . .	10,508 43					
Mar.	"	" . . .	12,702 48		"	"	<i>New Account</i> . .	3,440 55					
				\$					\$				
To Old Acct. . . .				3,440 55									

* The blank column is used to insert opposite each item the Journal page.

* The blank column is used to insert opposite each item the Journal page.

Dr.		MERCHANDISE.		Cr.			
1848				1848			
Jan.	To Sundries	3,500	00	Jan.	By Cash	1,850	00
"	" Cash	2,573	24	"	" Sundries	7,565	74
"	" Sundries	7,384	56	"	" Cash	1,350	00
Feb.	" Cash	1,500	00	"	" Sundries	11,490	46
"	" Sundries	7,449	89	Mar.	" Cash	2,153	28
Mar.	" Cash	637	00	"	" Sundries	10,380	00
"	" Sundries	11,144	00	"	" <i>New Account</i> . .	6,729	50
"	" S. M. Richardson		6 24				
"	" <i>Profit & Loss</i> . .	7,324	05				
		\$	41,518 98			\$	41,518 98
	To Old Acct. . . .		6,729 50				

Dr.		BILLS RECEIVABLE.		Cr.			
1848				1848			
Jan.	To Sundries . . .	3,827	36	Jan.	By Cash	2,500	00
"	" John Wilson . .	800	00	Feb.	" "	2,570	00
"	" Merchandise . .	6,978	24	Mar.	" "	9,199	20
Feb.	" Cash	3,000	00	"	" Merchandise . .	3,379	80
"	" Merchandise . .	7,340	22	"	" Interest	52	40
"	" William Brown .	1,531	55	"	" Profit & Loss . .	574	33
Mar.	" Merchandise . .	6,120	00	"	" <i>New Account</i> . .	12,821	64
"	" S. M. Richardson	1,500	00				
		\$	31,097 37			\$	31,097 37
	To Old Acct. . . .	12,821	64				

Dr.		PROFIT & LOSS.		Cr.			
1848				1848			
Feb.	To Cash	28	50	Mar.	By Merchandise . .	7,324	05
Mar.	“ “	136	75	“	“ Bank Stock . . .	356	75
“	“ William Brown .	574	33				
“	“ Charges	1,692	88				
“	“ Interest	45	94				
“	“ Stock	5,202	40				
		\$	7,680			\$	7,680
	.		80				80

SEC. I.—EXEMPLIFICATION.

Dr.			WILLIAM BROWN.			Cr.		
1848				1848				
Jan.	To Bills Payable . .	500 00	Jan.	By Sundries . . .	1,575 23			
Feb.	“ Merchandise . .	4,150 24	“	“ Merchandise . .	1,560 24			
“	“ Charges . . .	16 78	Feb.	“ Bills Receivable .	1,531 55			
		\$ 4,667 02			\$ 4,667 02			

Dr.			STOCK.			Cr.		
1848	To <i>New Account</i> . .	19,844 22	1848	Jan. By Sundries . . .	14,641 82			
			Mar.	“ <i>Profit & Loss</i> . .	5,202 40			
		\$ 19,844 22			\$ 19,844 22			
			Ap'l	By Old Account . .	19,844 22			

Dr.		BILLS PAYABLE.		Cr.			
1848			1848				
Jan.	To Cash	874	20	Jan.	By Sundries . . .	5,843	24
Feb.	“ “	5,354	00	“	“ William Brown .	500	00
Mar.	“ “	7,583	00	“	“ Merchandise . .	5,824	32
	“ <i>New Account</i> . .	11,302	02	Feb.	“ “	6,124	57
				“	“ John Wilson . .	791	09
				Mar.	“ Merchandise . .	4,230	00
				“	“ G. L. Morgan . .	1,800	00
		\$	25,113 22			\$	25,113 22
					By Old Account . .	11,302	02

Dr.				CHARGES.				Cr.			
1848						1848					
Jan.	To Cash	.	.	.	.	111	61	Jan.	By John Wilson	.	8 00
Feb.	" "	.	.	.	.	744	08	Feb.	" "	.	12 93
Mar.	" "	.	.	.	.	874	90	"	" William Brown	.	16 78
								"	" Profit & Loss	.	1,692 88
						\$	1,730 59			\$	1,730 59

Dr.				S. M. RICHARDSON.				Cr.	
1848				1848					
Mar.	To Merchandise . .		4,260 00	Mar.	By Cash			1,350 00	
				"	" Bills Receivable .			1,500 00	
				"	" Merchandise			6 24	

Dr.		G. L. MORGAN.		Cr.			
1848			1848				
Mar.	To Cash	1,253	24	Mar.	By Merchandise . .	3,534	20
	" Bills Payable . .	1,800	00				

LEDGER.

DR.

JOHN WILSON.

CR.

1848			1848		
Jan.	To Sundries . . .	1,875 80	Jan.	By Bills Receivable .	800 00
"	" Charges . . .	8 00	"	" Cash	350 00
"	" Merchandise . .	587 50	Feb.	" "	800 00
Feb.	" Bills Payable . .	791 09	"	" Merchandise . .	1,325 32
"	" Charges . . .	12 93			
		<u>\$3,275 32</u>			<u>\$3,275 32</u>

DR.

INTEREST.

CR.

1848			1848		
Mar.	To Cash	23 54	Feb.	By Cash	30 00
"	" Bills Receivable .	52 40	Mar.	" Profit & Loss . .	45 94
		<u>\$75 94</u>			<u>\$75 94</u>

DR.

BANK STOCK.

CR.

1848			1848		
Jan.	To Sundries . . .	7,000 00	Feb.	By Cash	125 00
Mar.	" Profit & Loss . .	356 75	Mar.	" New Acct. . . .	7,231 75
		<u>7,356 75</u>			<u>\$7,356 75</u>
	To Old Acct. . . .	<u>\$7,231 75</u>			

SECTION II.

ANALYSIS.

THE Journal and Ledger, as exemplified, will be found obscured by much technicality; for Book-keeping, like most other sciences, has adopted a language of its own, to avoid circumlocution; and this conventional phraseology often produces in the mind of the tyro, in his attempt to analyse the process, ideas entirely remote from those the same phrases would convey to the accountant. For example: we find "Cash to Sundries," or "Cash Dr. to Sundries," which, to an ordinary reader, would seem to intimate that cash, in some way, must owe sundry things. Now the word sundries means several ledger accounts, and the whole meaning of the phrase is, that one debit item belonging to the cash account equals several credit items belonging to other accounts.

The Ledger, as before intimated, is the principal book of a system of accounts. It is a well contrived series of classified items, affording ready access to the sum total of each important class of facts. For example: if we would know what amount of notes we have issued we have only to turn to the account headed "Bills Payable" and add the right hand column, or for the amount redeemed add the left hand column, and it is obvious that a comparison of these two totals shows what amount is unredeemed or outstanding. Each account in the Ledger has a settled plan of arrangement, which cannot be deviated from. The left hand column of an account is called the Debtor (Dr.) column, and the right the Creditor (Cr.) column; but the technical manner of using these terms is apt to occasion the learner much perplexity. It may appear to a beginner that Bills Payable ought to be credited when a note is redeemed, or that Cash ought to be credited when it is received; but he must be content for the present to hear and learn what *is* done, and so qualify himself to appreciate why it *ought* to be done. It is very easy to learn what is to be recorded as Dr. or Cr. in any account, and when the whole plan of the accounts is seen and appreciated all will appear harmonious and consistent. Every business transaction requires us to pass two or more items to different accounts in the Ledger. To enter these items then into the Ledger at once would lead to inconvenience and difficulty, as in case of mistake we could not review the entries of any one transaction; they would be in several parts of the Ledger, and we should have no direct means of finding them all again, and testing their accuracy. To obviate this defect a Journal is kept of the Debit and Credit items assigned to the Ledger for each transaction, in the order of its date. Thus if we bought, Jan. 5th, a quantity of merchandise, for which we paid cash \$500, our Ledger requires, that we should credit cash account with the cash paid, and debit merchandise account with the cost of merchandise, and we record on the Journal,

	Jan. 5,	
Merchandise	500	
To Cash		500

Thus for this transaction we assign two items to the Ledger, which are copied (posted) into their proper accounts; and consequently the Journal is a record of all entries passed to the Ledger, each transaction under its proper date.

Journalizing, then, is the art of assigning its proper place in the Ledger to each item in a transaction. To know the proper place is to know the laws, principles, and objects of each account, and a false journal entry can only be proved false by showing its want of conformity to some principle of the Ledger. We therefore proceed to explain the preceding Ledger, in such a manner as will render its laws and principles manifest and simple; but we must divest it of all technical references, and direct attention only to its prominent features of utility, so that it may be clearly demonstrated what accounts are required, and in what cases they are to be debited or credited.

LEDGER.—Primary Accounts.

RECEIPTS.		CASH.		PAYMENTS.	
On hand commencing	5,857	13	Paid out	3,559	05
Received since	4,700	00	"	10,626	58
"	4,875	00	"	10,508	43
"	12,702	48	From amt. received	28,134.61	
			Deduct paid out	24,694.06	
			Balance on hand	\$3,440.55.	
Total received	\$28,134	61	<i>This Balance is Resources.</i>		

RECEIVED.		BILLS RECEIVABLE.		DISPOSED OF.	
On hand commencing	3,927 36	Disposed of	2,500 00		
Received since	800 00	" "	2,570 00		
" "	6,978 24	" "	9,199 20		
" "	3,000 00	" "	3,379 80		
" "	7,340 22	" "	52 40		
" "	1,531 55	" "	574 33		
" "	6,120 00	Total received	31,097.37		
" "	1,500 00	" disposed of	18,275.73		
Total received	<u>\$31,097 37</u>	Balance on hand	<u>\$12,821.64</u>		
		<i>This Balance is Resources.</i>			

REDEEMED.	BILLS PAYABLE.		ISSUED.		
Redeemed	874	20	Outstanding at commencement	5,843	24
"	5,354	00	Subsequently issued	500	00
"	7,583	00	"	5,824	32
Total issued	25,113.22		"	6,124	57
" redeemed	13,811.20		"	791	09
Balance unredeemed	<u>\$11,302.02</u>		"	4,230	00
			"	1,800	00
<i>This Balance is Liabilities.</i>			Total issued	<u>\$25,113</u>	<u>22</u>

DR.	JOHN WILSON.				CR.
	1,875	80		800	00
	8	00		350	00
	587	50		800	00
	791	09		4,325	32
	12	93			
His accountability to me	\$3,275	32	My accountability to him	\$3,275	32
			<i>This Account is Settled.</i>		

DR.		WILLIAM BROWN.		CR.	
	500	00		1,575	23
	4,150	24		1,560	24
	16	78		1,531	55
	<u>\$4,667</u>	<u>02</u>		<u>\$4,667</u>	<u>02</u>
			<i>This Account is also Settled.</i>		

DR.	S. M. RICHARDSON.		CR.
	4,260	00	1,350 00
He is accountable to me	4,260.00		1,500 00
I am accountable to him	2,856.24		6 24
Balance owing me	<u>\$1,403.76</u>		
		<i>This Balance is Resources.</i>	

DR.	G. L. MORGAN.				CR.
	1,253	94	My accountability to him His accountability to me Balance due him <u>\$480.96</u>	3,534	20
	1,800	00			
<i>This Balance is Liabilities.</i>					

LEDGER.—Secondary Accounts.

STOCK.

			Capital commencing	14,641	82
			To Capital	14,641.82	
			Add Net Gain	5,202.40	
			My present worth is	<u>\$19,844.22</u>	

OUTLAY.

MERCHANDISE.

RETURNS.

Value of goods commencing	3,500	00	Sales or returns	1,850	00
Cost of goods purchased	2,573	24	" " " " " " " "	7,565	74
" " " " " " " "	7,384	56	" " " " " " " "	1,350	00
" " " " " " " "	1,500	00	" " " " " " " "	11,490	46
" " " " " " " "	7,449	89	" " " " " " " "	2,153	28
" " " " " " " "	637	00	" " " " " " " "	10,380	00
" " " " " " " "	11,144	00	Value of goods unsold, or anticipated		
" " " " " " " "	6	24	returns	6,729	50
From total returns	41,518.96			<u>41,518</u>	<u>98</u>
Deduct total outlay	34,194.93				
Profit	<u>2,324.05</u>				

See Profit & Loss.

This anticipated returns is also Resources.

OUTLAY.

CHARGES.

RETURNS.

Business Expenses	111	61	Collected back or charged to others	8	00
" " " " " " " "	744	06	" " " " " " " "	12	93
" " " " " " " "	874	90	" " " " " " " "	16	78
	<u>1,730</u>	<u>59</u>	Total outlay	1,730.59	
			" returns	37.71	
			Loss	<u>\$1,692.88</u>	

OUTLAY.

INTEREST.

RETURNS.

Interest paid or payable	23	54	Interest received or receivable	30	00
" " " " " " " "	52	40			
	<u>75</u>	<u>94</u>	From outlay	75.74	
			Deduct returns	30.00	
			Loss	<u>\$45.94</u>	

OUTLAY.

BANK STOCK.

RETURNS.

Value at commencement	7,000	00	Received dividend	125	00
Total returns	7,356.75		Value of Stock ending, or anticipated		
" outlay	7,000.00		returns	7,231	75
Profit	<u>\$356.75</u>		Total returns	<u>\$7,356</u>	<u>75</u>

The anticipated returns are Resources.

LOSSES.

PROFIT & LOSS.

PROFITS.

Sundry Losses and Expenditures	28	50	Profit by Merchandise	7,324	05
" " " " " " " "	136	75	" Bank Stock	356	75
" " " " " " " "	574	33	Total gain	<u>\$7,680</u>	<u>80</u>
Loss on Charges Account	1,692	88			
" Interest " " " " " "	45	94	From total gain	7,680.80	
			Deduct total loss	2,478.40	
			Net gain	<u>\$5,202.40</u>	

See Stock Account.

SEC. II.—ANALYSIS.

ANALYSIS OF THE LEDGER.

CASH ACCOUNT.

In the Cash Account are collected together, on the left hand or debit side, the amount of Cash on hand, commencing, together with every subsequent receipt, and in the right hand or credit column, the amount of every subsequent payment :

The total debits or receipts being	.	.	.	.	.	28,134.61
And the total credits or payments	.	.	.	.	.	24,694.06
There must remain on hand	.	.	.	.	.	<u>\$3,440.55</u>

Hence the Cash Account always shows the amount of Resources in Cash.

BILLS RECEIVABLE ACCOUNT.

In this account are collected together, on the debit side, the amount of other men's Notes and Acceptances on hand commencing, and all subsequently received ; and, on the credit side, all disposed of :

The total amount received being	.	.	.	.	.	31,097 37
And the total amount disposed of	.	.	.	.	.	18,275.73
There must be on hand	.	.	.	.	.	<u>\$12,821.64</u>

Hence, by this arrangement of the Bills Receivable, the balance of the account always shows the amount of Resources in other men's Notes or Acceptances.

BILLS PAYABLE ACCOUNT.

In this account are collected, on the credit side, the amount of our own Notes or Acceptances outstanding at the commencement, and all subsequently issued or accepted (see Definitions) ; and on the debit side, all redeemed or taken up.

The total amount issued being	.	.	.	.	.	25,113.22
“ “ “ redeemed being	.	.	.	.	.	13,811.20
There must be outstanding	.	.	.	.	.	<u>\$11,302.02</u>

Hence the balance of this account always shows the amount of Notes outstanding as Liabilities.

PERSONAL ACCOUNTS.

On the debit side of John Wilson's account are collected all sums for which he has become accountable or indebted to me ; and on the credit side, all sums for which I have become accountable or indebted to him ; and, as both sides are equal, the account is settled.

William Brown's account is also settled.

S. M. Richardson's account shows, on the debit side, that he is accountable to me

to me	.	.	.	.	.	4,260.00
And, on the credit side, that I am accountable to him	.	.	.	.	.	2,856.24
Consequently he owes me	.	.	.	.	.	<u>\$1,403.76</u>

G. L. Morgan's account shows, on the credit side, that I am accountable to him

to him	.	.	.	.	.	3,534.20
And, on the debit side, that he is accountable to me	.	.	.	.	.	3,053.24
Consequently I owe him	.	.	.	.	.	<u>\$480.96</u>

Under this arrangement, the balance of a personal account always shows whether he owes us or we owe him and the balance is Resources or Liabilities, as the case may be.

SEC. II.—ANALYSIS.

Accounts with Banks, Firms, or Corporate Institutions, with whom we may do business, are all to be understood as included in the term **Personal Accounts**; for example—the nature of the account is the same whether E. S. Houghton, or Houghton & Arnold, or North River Bank owes us.

The accounts already explained, viz. Cash, Bills Receivable, Bills Payable, and Personal Accounts, constitute one entire set, which we denominate **PRIMARY ACCOUNTS**.

These, together with the estimated value of property unsold, enable us to make a full statement of **Resources and Liabilities**; and, consequently, to determine the present worth of the parties whose operations they record.

We must now explain a distinct kind of accounts, which show how much the business commenced with, and how much it has gained since; the sum of the two being its present worth.

Thus, if the business commenced with	14,641.82
And gained in its subsequent operations	5,202.40
Its present worth must be	<u>\$19,844.22</u>

But the accounts already examined show its present worth, viz:—

Total Resources	31,627.20
“ Liabilities	11,782.98
Present worth	<u>\$19,844.22</u>

Double Entry, then, embraces these two distinct kinds of accounts, from each of which we can deduce the present worth; and when both agree the books are said to balance.

The first set we have already denominated **PRIMARY ACCOUNTS**. Those we now proceed to explain we denominate **SECONDARY ACCOUNTS**.

The **Stock Account** shows on the Credit side what the business commenced with.

NOTE.—Any capital withdrawn would appear on the Debit side of Stock.

The **MERCHANDISE Account** shows on the Debit side the value of goods on hand commencing, and the cost of all subsequent purchases.

The Credit side shows all returns or sales of said goods, to which is added the value of goods on hand at the end.

Thus the Sales amount to	34,789.48
Anticipated Returns of goods unsold	6,729.50
Total Returns	<u>41,518.98</u>
“ Cost	34,194.93
Profit on Merchandise Account	<u>\$7,324.05</u>

Hence we can always find the Profit or Loss on the Merchandise Account by valuing goods unsold, adding that value to the Credit side, and taking the difference. If the Debit side be the greater it is Loss; if the Credit, Profit.

The **CHARGES Account** shows on the Debit side all the ordinary business expenses; such as Clerks' Salaries, Rent, Postages, Fuel, Cartage, Labour, &c.; and the Credit side shows the returns this expenditure has made by our collecting the said Postages, Labour, or Cartage, &c., back from customers.

The Expenditures amount to	1,730.59
“ Returns “ “	37.71
And the Loss	<u>\$1,692.88</u>

The **INTEREST Account** shows on the Debit side all sums paid or payable for Interest, and the Credit side all sums received or receivable. Hence the balance is our Gain or Loss by Interest.

SEC. II.—ANALYSIS.

The Outlay is	75.94
“ Returns	30.00
And the Loss	<u>\$45.94</u>

The BANK STOCK Account shows on the Debit side all Bank Stock has cost us, and on the Credit side all the returns, to which we add the present value, or anticipated returns.

The Returns are	125.00
“ Anticipated Returns	7,231.75
Total Returns	7,356.75
Cost	7,000.00
The Profit is	<u>\$356.75</u>

The Profit & Loss Account shows on the Debit side all miscellaneous expenditures or losses occurring in the course of the business, for which no particular account has been provided; and at the end of the business we bring in all the Losses shown on other accounts. The Credit side shows all miscellaneous returns or Gains accruing in the course of the business, for which we have provided no particular account, and at the end we bring in all Gains shown on other accounts. The balance of this account, therefore, shows our net Gain in business.

The total Gains are	7,680.80
“ “ Losses “	2,478.40
“ net Gain is	5,202.40
Which if added to our first capital	14,641.82
Gives our present worth	<u>\$19,844.22</u>

Hence the Secondary Accounts (Stock excepted) are arranged to show our Gains or Losses; the debits showing our expenditure, outlay, or losses,—and the credits, returns or gains; and as many of such accounts may be kept as the nature of the business requires, any article we do not wish to exhibit the gain or loss on separately we may include in the title Merchandise; but if we operate largely in tobacco, for example, and wish to see the result, we show the outlay and returns in an account headed “Tobacco.”

When we wish to give a brief representation of the state of each ledger account we adopt the form of what accountants call a trial balance, which consists of the title of each account, with the sum total of each side. For example, the following gives a concise view of the foregoing ledger :

TRIAL BALANCE.

28,134.61	Cash	24,694.06
31,097.37	Bills Receivable	18,275.73
13,811.20	Bills Payable	25,113.22
4,260.00	S. M. Richardson	2,856.24
3,053.24	G. L. Morgan	3,534.20
	Stock	14,641.82
34,194.93	Merchandise	34,789.48
1,730.59	Charges	37.71
075.94	Interest	30.00
7,000.00	Bank Stock	125.00
739.58	Profit & Loss	
<u>\$124,097.46*</u>		<u>\$124,097.46</u>

* The total Debit matter on the Ledger always equals the total Credit matter, the reason of which will appear in Sec. III.
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SEC. II.—ANALYSIS.

Now the Merchandise unsold being valued at \$6,729.50, and the Bank Stock at \$7,231.75, we are prepared to draw up the following Analysis, or Balance Sheet :

ANALYSIS OF FOREGOING LEDGER.

				Resources.	Liabilities.
Cash	.	.	receipts	28,134.61	
"	.	.	payments	24,694.06	
"	.	.	on hand		3,440.55
Bills Receivable	.	.	received	31,097.37	
"	"	.	disposed of	18,275.73	
"	"	.	on hand		12,921.64
Bills Payable	.	.	issued	25,113.22	
"	"	.	redeemed	13,811.20	
"	"	.	unredeemed		11,302.02
S. M. Richardson	is accountable to us	.		4,260.00	
	We are accountable to him	.		2,856.24	
"	"	He owes us	.		1,403.76
G. L. Morgan.	We are accountable to him	.		3,534.20	
"	"	He is accountable to us	.	3,053.24	
"	"	We owe him	.		480.96
Merchandise	on hand valued at	.		6,729.50	
Bank Stock	" " " "	.		7,231.75	
	Our original capital was	.	*14,641.82		
	" subsequent gain is	.	5,202.40		
	" present worth is	.			19,844.22
				*\$ 31,627.20	31,627.20
				Losses.	Gains.
Merchandise	.	.	sales	34,789.48	
"	.	.	on hand	6,729.50	
				41,518.98	
				Cost	
				34,194.93	7,324.05
Charges	.	.	outlay	1,730.59	
"	.	.	returns	37.71	
				Loss	
Interest	.	.	outlay	75.94	
"	.	.	returns	30.00	
				Loss	
Bank Stock	.	.	returns	125.00	
"	"	.	on hand	7,231.75	
				7,356.75	
				Cost	
				7,000.00	
				Gain	
Profit & Loss	.	.	debit postings		739.58
				Total gain	
				7,680.80	
				" loss	
				2,478.40	
				Net gain	
				5,202.40	
				\$ 7,680.80	7,680.80

* This is a neat way of showing briefly that the sum of the original capital and gains equals the difference between the resources and liabilities. It requires, however, to be carefully noticed and understood. It must be obvious that the difference between the resources and liabilities, if added to the liabilities, must make an amount equal to the resources; for it is only the smaller sum added to the difference which must make the greater. Now in place of the difference we substitute the capital added to the gain, and as we find it answer the same purpose by making it balance, it must be one and the same sum.

SEC. II.—ANALYSIS.

The student would do well to pause here, and reflect a little on the simplicity of the account presented by the Book-keeper in the preceding Analysis. He has been recording, we will suppose, the business of twelve months, embracing perhaps five thousand transactions or changes that have been effected in the state of affairs from day to day; and what story does he come with to convince us that he has faithfully performed his trust? He can say, in presenting his statement to you—You put me in charge of your Cash; here is an account of every dollar put into my hands, and of every dollar I paid out: if you would test it, examine the transactions, and see that each receipt and payment is included. The balance remaining in my hands is in the Resources; count the Cash in your Till and in Bank, and you will find it agree. Here is also an account of all the Notes Receivable that have passed through my hands, the amount received and the amount disposed of. The balance on hand is in your Resources; tell over the Notes on hand, and you will find them agree. And so on with each separate account. From what would appear in detail a confused and conglomerated mass of interminable chaffering and changing, he presents a statement so clear and so readily substantiated, that it must at once defy all cavil. Human ingenuity could devise nothing more simple, and the arrangement of Double Entry can only appear a complicated process to those who have never been at the pains to examine its general features, or had the good fortune to be placed on the right track of investigation; who plunge into a fog and involve themselves in a labyrinth of detail, unprovided with chart or compass by which they may fix upon a single point; all is confusion, because nothing has been previously generalized, and no plan of operations considered.

EXERCISE I.

My Book-keeper presents me the following statement of my Ledger accounts at this time; that is, each side of the several accounts has been added, and the totals copied down.

25,280	Cash	13,575
12,500	Bills Receivable	7,500
2,000	Bills Payable	7,000
3,000	L. B. Binsse & Co.	3,500
1,000	Geo. Tredwell	
	Stock	18,000
10,840	Merchandise	10,030
7,850	Ship Jane	1,640
1,835	Charges	500
976	Interest	2,500
	Profit & Loss*	436
<u>\$65,281</u>		<u>\$65,281</u>

I have taken an inventory of Merchandise on hand, and value it at \$4,000. I also value the Ship Jane at \$7,000.

Required an Analysis of the above, showing my Resources, Liabilities, Gains, Losses, and Present Worth.

* This item in Profit & Loss is some returns of the business for which no particular heading or account has been provided, for example: we may receive an old debt which was considered lost, or we may get an abatement from some man's account. This account may also have debits of a similar nature, for example: we may lose money by broken bank notes or depreciated paper, debts compromised, abatements on accounts rendered, and various other ways.

SEC. II.—ANALYSIS.

● ANALYSIS OF EXERCISE I. ●

PRIMARY ACCOUNTS.

				<i>Resources.</i>	<i>Liabilities.</i>
<i>Cash,</i>	Amount of my receipts	25,280			
"	" " payments	13,575			
"	" remaining on hand		11,705		
<i>Bills Receivable.</i>	Amount of other men's notes received	12,500			
"	" " " disposed of	7,500			
"	" remaining on hand		5,000		
<i>Bills Payable.</i>	Amount of my own notes issued	7,000			
"	" " redeemed	2,000			
"	" remaining to be paid				5,000
<i>L. B. Binns & Co.</i>	I am accountable to them	3,500			
"	They are accountable to me	3,000			
"	I owe them				500
<i>Geo. Tredwell.</i>	Is accountable to me		1,000		
<i>Merchandise.</i>	On hand valued at		4,000		
<i>Ship Jane.</i>	" " "		7,000		
	My original Capital was	18,000			
	" Net gain is	5,205			
	" Present Worth is				23,205
				<u>\$28,705</u>	<u>\$28,705</u>

SECONDARY ACCOUNTS.

				<i>Losses.</i>	<i>Gains.</i>
<i>Merchandise.</i>	Amount of returns or sales	10,630			
"	" anticipated returns	4,000			
	Total returns	14,630			
	Cost	10,840			
	Profit on Merchandise				3,790
<i>Ship Jane.</i>	Amount of returns	1,640			
"	" anticipated returns	7,000			
	Total returns	8,640			
	Cost	7,850			
	Profit on Ship				790
<i>Charges.</i>	Outlay	1,835			
"	Returns	500			
	Loss		1,335		
<i>Interest.</i>	Returns	2,500			
"	Outlay	976			
	Gain				1,524
<i>Profit & Loss.</i>	Miscellaneous items				436
	Total Gains	6,540			
	" Losses	1,335			
	Net Gain		5,205		
				<u>\$6,540</u>	<u>\$6,540</u>

SEC. II.—ANALYSIS.

In the following exercises the student must distinguish Primary Accounts from Secondary. The Primary Accounts are *Cash, Bills Receivable, Bills Payable, and Personal Accounts*; all others are Secondary.

EXERCISE II.

<i>Debits.</i>		<i>Value of Property Unsold.</i>	<i>Credits.</i>
25,800	.	Cash	12,500
38,250	.	Merchandise	32,485
7,500	.	William Van Allen	3,847
7,630	.	Shipment to London	7,548
25,000	.	Bills Payable	32,000
5,180	.	Cotton	6,234
38,000	.	Bills Receivable	24,000
3,963	.	Charges	1,436
327	.	Profit & Loss	
17,530	.	Ship Rover	3,840
		Stock	44,270
5,850	.	Thomas F. Clarkson	9,875
8,000	.	David Clarkson	5,000
<u>\$183,030</u>			<u>\$183,030</u>

Required the Analysis.

EXERCISE III.

14,840	.	Bills Receivable	4,000
7,800	.	Shipment to Cadiz	6,840
	.	John B. Dash	4,800
6,000	.	Ship Ann	2,000
24,975	.	Cash	9,000
5,000	.	Cotton	4,000
	.	Francis Van Rensselaer	1,000
14,000	.	Merchandise	17,000
4,000	.	Bills Payable	12,500
	.	Stock	11,500
25	.	Profit & Loss	
	.	William M. Vail	4,000
<u>\$76,640</u>			<u>\$76,640</u>

Required the Analysis.

EXERCISE IV.

6,000	.	Jno. Wiley	5,000
10,000	.	Merchandise	13,250
10,000	.	Bills Receivable	6,000
7,800	.	Ship Sarah	1,850
3,000	.	Samuel Randal	2,210
8,000	.	Shipment to Canton	8,685
14,500	.	Cash	12,000
480	.	Profit & Loss	340
3,000	.	Bills Payable	3,645
4,000	.	Robt. D. Weeks	1,000
	.	Stock	12,800
<u>\$66,780</u>			<u>\$66,780</u>

Required the Analysis.

SEC. II.—ANALYSIS.

EXERCISE V.

<i>Debits.</i>			<i>Value of Property Unsold.</i>	<i>Credits.</i>
11,200	.	Bills Payable	.	15,000
15,000	.	Merchandise	3,000	14,980
50,800	.	Cash	.	29,800
14,000	.	Evert D. Long	.	10,000
7,885	.	Ship Star	7,000	1,735
12,000	.	Bills Receivable	.	8,000
600	.	Charges	.	
	.	Stock	.	26,000
80	.	Profit & Loss	.	
1,950	.	James Levy	.	2,100
9,800	.	Shipment to Canton	.	14,500
1,000	.	Bininger & Cozens	.	2,000
1,600	.	Shipment to Baltimore	.	1,200
1,800	.	Coman, Hopkins & Co.	.	2,400
<u>\$127,715</u>				<u>\$127,715</u>

Required the Analysis.

EXERCISE VI.

	.	Stock	.	32,200
80,840	.	Cash	.	45,000
45,890	.	Merchandise	21,500	34,230
16,485	.	Bills Payable	.	60,985
10,700	.	Ship Sirius	10,000	3,600
2,800	.	Marshall Lefferts	.	3,750
14,000	.	Tallow	.	12,030
20,390	.	Bills Receivable	.	10,800
12,000	.	Real Estate	13,000	4,000
2,300	.	Chas. F. Stagg	.	
1,500	.	Interest	.	
3,700	.	Effingham Lawrence	.	2,900
11,000	.	Shipment to Havre	.	14,750
4,550	.	Henry Long	.	5,900
890	.	Charges	.	
5,800	.	Austens & Spicer	.	6,500
7,600	.	John Van Bergen	.	3,800
<u>\$240,445</u>				<u>\$240,445</u>

Required the Analysis.

SEC. II.—ANALYSIS.

EXERCISE VII.

<i>Debits.</i>		<i>Value of Property unsold.</i>	<i>Credits.</i>
49,000	. . .	Cash	35,143
13,190	. . .	Merchandise 6,000	11,890
	. . .	Joslyn Hutchinson	3,700
5,500	. . .	Real Estate	8,000
16,000	. . .	Bills Receivable	8,020
1,385	. . .	Shipment to London	1,875
	. . .	William Hoeber	1,850
6,742	. . .	Shipment to Cadiz 5,500	
9,850	. . .	Alfred Seton	6,870
11,000	. . .	Cotton	10,730
3,000	. . .	Bills Payable	15,000
	. . .	Stock	24,470
4,800	. . .	David C. Halsted	2,300
11,000	. . .	Ship Helen 10,000	1,987
104	. . .	Interest	
650	. . .	Charges	
200	. . .	Profit & Loss	
5,304	. . .	Shipment to Dublin	5,890
<u>\$137,725</u>			<u>\$137,725</u>

Required the Analysis.

EXERCISE VIII.

148.62	. . .	Cornell Brothers	3,995.98
11,846.66	. . .	Shipment to Havre	15,381.12
62,197.90	. . .	Cash	48,350.36
7,846.34	. . .	Hops	10,226.80
4,795.33	. . .	John N. Brinkerhoff	3,000.00
17,451.90	. . .	Bank Stock 2,000	6,728.50
839.22	. . .	Interest	500.00
5,911.59	. . .	William Adrain	2,168.19
9,076.87	. . .	Bills Payable	23,941.70
	. . .	Stock	40,000.00
763.04	. . .	A. W. Spies & Co.	2,548.30
26,889.36	. . .	Merchandise 11,947.50	18,785.36
2,144.30	. . .	Charges	297.80
4,864.38	. . .	Tallow	6,655.11
4,749.01	. . .	Halsted & Dash	1,905.64
8,000.00	. . .	Real Estate 1,000	5,000.00
38,860.00	. . .	Bills Receivable	20,860.00
5,841.07	. . .	Shipment to Charleston (lost)	
100.00	. . .	Profit & Loss	
5,187.24	. . .	Sugar	7,167.97
<u>\$217,512.83</u>			<u>\$217,512.83</u>

Required the Analysis.

SEC. II.—ANALYSIS.

EXAMINATION.

The student should on no account proceed to Section III. until he can answer satisfactorily and promptly the following questions :—

What do the Debits of Cash Account show ?—the Credits ?
What are called Bills Receivable ? What are called Bills Payable ?
What do the Debits of Bills Receivable Account show ?—the Credits ?—the face of the Notes, or the money produced ?
What do the Debits of Bills Payable Account show ?—the Credits ?—the face of the Notes, or the money ?
What do the Debits of a Personal Account show ?—the Credits ?
What does the Balance of Cash Account show ?
What does the Balance of Bills Receivable Account show ? Why ?
What does the Balance of Bills Payable Account show ? Why ?
What does the Balance of a Personal Account show ?
What accounts are called *Primary Accounts* ?
Why are they called Primary Accounts ?
Wherein do Primary Accounts differ from Secondary ?
Which are Secondary Accounts ?
What does the Credit side of Stock Account show ?
What does the Debit side of Merchandise Account show ?—the Credits ? How do you find the value of Merchandise unsold ?
Is not the value of Merchandise unsold put down as Resources ? Why, then, is not Merchandise a Primary Account ?
Answer.—The value of goods on hand is not shown by the *Account* of Merchandise, but by an inventory taken of the goods.
What, then, is the use of the Merchandise Account, since it does not show the goods unsold ?
How do you find the Profit or Loss on Merchandise.
What is meant by Charges Account ? How is it arranged ?
How can Charges make returns ? What does the Balance of this account show ?
What does the Credit side of Profit & Loss Account show ?—the Debit side ? What does the Balance show ?
What does the Credit side of Stock Account show ?
What do you add to the Capital to find your present worth ?
Is there any other way of finding your present worth ?
Do the Primary Accounts show all your Resources ?
What more information is wanted ?
Are the valuations necessary to find your Gains or Losses ? What are the valuations called in finding your Gains or Losses ?

SECTION III.

COMPI LATION.

THE student who has mastered the preceding section has now surmounted the greatest apparent difficulty presented in accounts ; he is in possession of a general plan of arrangement, which, if carried out, must lead to the desired point ; viz. a clear view of the position of the business transacted. He has, in fact, a well defined theory of operations, and it only remains to be considered what difficulties will present themselves in applying this theory to the daily routine in detail.

Receiving cash, paying cash, buying merchandise, and selling merchandise, in most cases, form nine-tenths of the business transacted. Let us then take these in succession, and see how our theory could be carried out :—

1st. Suppose we make it a rule to record all transactions of receiving cash in one book (see Cash Book) ; it will then be very easy to dispose of these transactions in the Ledger, for we may add together all cash received daily or monthly, and enter (post) the amount on the Debit side of the Ledger Account of Cash ; and at the same time, and from the same source, we post each sum in detail to the credit of some other account. For example : the first item received is from John Wilson, on account, and consequently we must post the amount to the Credit side of Wilson's account, to show that we are accountable to him ; the next sum received is for merchandise sold, and we post the amount to the Credit side of Merchandise account ; the next is received for a note we disposed of, and we post it to the credit of Bills Receivable account ; from which it is evident that every sum constituting those receipts must become a credit item of some Ledger account, and the aggregate, being entered on the Debit side of Cash account, the debit item posted for these transactions to the Ledger will be the same in amount as the aggregate of the credit matter.

2d. The transactions of paying cash are all to be posted to the Debit side of their respective Ledger accounts ; for when we pay for charges, the Charges account must show on the Debit side our outlay ; if we pay for merchandise, the Debit side of that account must show its cost ; if we pay for our note, the Debit side of Bills Payable account must show the note redeemed ; and so the aggregate of the debit postings will in amount be the same as the total payments posted to the Credit side of Cash. So far then the recording of cash transactions and posting them to the Ledger, in conformity to our theory, seems to offer no difficulty.

3d. The merchandise bought being all entered on the Invoice Book, we post each separate purchase to the Credit side of the person's account of whom we bought it, if on credit ; but if on our note, we put it to the Credit side of the Bills Payable account, which is to show what notes we issued ; and the total amount purchased we post to the Debit side of Merchandise account, which, according to our theory, must show its cost.

4th. Merchandise sold being all entered on the Sales Book, we post each separate sale to the debit of the party's account who owes for it ; or if we took notes, to the Debit of Bills Receivable account ; and the aggregate sales, to the credit of Merchandise account. Now there remain to be considered only the few transactions that are not included in the above example :—

If we found that there was interest due on John Brown's account, we could not make the entry on any of the above-named books ; we should therefore enter it on the Day Book, and post the amount to the Debit side of John Brown's account, and Credit of Interest account. Or, if John Brown gave us his note to pay his account, we must, for the same reason, enter it on the Day Book, and put it to the Debit of Bills Receivable, and Credit of John Brown. But if he gave us his note for goods that had not been debited to his account, then we could enter the note on the Sales Book (see S. B. 12th January) ; in which case John Brown would neither be debited with the goods, nor credited with the note. From this it will appear that every transaction entered on the Day Book causes two postings to the Ledger ; but it is

OPENING BOOKS.

not so with the other books. In the receipts of cash for the first month we have to post only one debit item for five credit items, because the whole five receipts are posted in one sum; whereas had we entered all these transactions on the Day Book every sum must have been posted twice, making five entries of cash where one would suffice. It is now a very general practice to post from the books named, without making any Journal, and it must be evident that an acquaintance with the accounts in the Ledger is all that is required to enable the learner to perform this duty with facility. We have not, however, introduced this mode of keeping books for the purpose of recommending it to universal practice; we have chosen it only as the best method of initiating the learner. The Journal will be introduced hereafter, in connexion with such business as requires its use.

EXERCISE I. (JANUARY.)

POSTING FROM SALES BOOK, INVOICE BOOK, CASH BOOK, AND DAY BOOK, WITHOUT USING A JOURNAL.

The state of my affairs this day, January 1st, 1849, is as follows:—I have in cash \$5,857.13; I have in other men's notes \$3,827.36; I owe on my own notes outstanding \$5,843.24; John Wilson owes me on account \$1,875.80; I owe William Brown on account \$1,575.23; my merchandise on hand is valued at \$3,500; I have bank stock worth \$7,000. Required a proper disposal of the above in Ledger accounts. (See blank Ledger at the end of this Section.) The Ledger accounts will now stand thus:—

<i>Debits</i>		<i>Credits</i>
5,857.13	Cash	
3,827.36	Bills Receivable.	
	Bills Payable	5,843.24
1,875.80	John Wilson.	
	William Brown	1,575.23
3,500.00	Merchandise.	
7,000.00	Bank Stock.	
	Stock	14,641.82
<hr/>		<hr/>
\$22,060.29		\$22,060.29
<hr/>		<hr/>

The Capital commencing is found by deducting Liabilities from Resources.

The above obviously represents the state of the whole business at present, and therefore the task before us is simply to note the changes produced by each transaction on each separate account.

The balance of Cash account will continue to show the cash on hand, if we keep recording each receipt on the Debit side, and each payment on the Credit side.

The balance of Bills Receivable account will show the amount of notes on hand, if we record all notes we receive from this time on the Debit side, and all we dispose of on the Credit.

The balance of Bills Payable account will continue to show the amount of notes outstanding, if we record all issued in future on the Credit side, and all redeemed on the Debit.

The balance of Personal accounts will be kept correct if we debit them when they become accountable to us, and credit them when we become accountable to them.

Thus we may regard each account as a pair of scales, in which we record the exact weight we keep adding to the one or the other side; so that at any time we know how much must be added to the lighter side to make it balance.

The Merchandise account cannot be made to show at all times the amount of merchandise on hand, but if we keep recording on the Debit side the amount of each purchase, and on the Credit side the amount of each sale, we can always estimate our profits thereon by adding to the sales or credits the value of what remains unsold, and then deducting the cost.

The Bank Stock, and all other such accounts of property bought and sold, are subject to the same principles.

SEC. III.—COMPILATION.

The Stock account will remain unaltered until the end of the period of business, when we shall estimate our profits, and add them to the original capital.

The entries already made would be termed in Book-keeping phrase "*opening the accounts*;" the process that follows, viz. *conducting them*, or recording the continual changes in the state of each, has a remarkable feature, which cannot too soon be noticed and impressed upon the mind, viz. that there can be no transaction which does not disturb at least two accounts, and whatever we enter to the Debit of one account must also be entered to the Credit of some one or more other accounts; in other words, every transaction supplies to the Ledger accounts as much debit as credit matter, it is doubly entered. For example: merchandise is sold for \$3,000; half to remain on account with John Doe, and half for a note. It is obvious that we must put \$3,000 to the Credit side of Merchandise account, \$1,500 on the Debit side of John Doe's account, and \$1,500 on the Debit side of Bills Receivable account—the two debit entries being equal to the one credit. Let the student go on to imagine any number of transactions, and he will find this rule hold good; in fact, it can be theoretically demonstrated, thus—the whole returns of the business must appear on the Credit side of the Secondary Accounts, and these returns being necessarily either cash, notes, or personal indebtedness, become debits of the Primary Accounts; and, on the other hand, all outlay in the business must appear on the Debit side of the Secondary Accounts, and this outlay being necessarily either cash paid, notes given, or debts contracted, becomes credit matter for the Primary Accounts. Hence at the opening of the accounts the debits on the Ledger equal the credits, and as equal debits and credits are supplied by each successive transaction we add equals to equals, and, consequently, the whole debit matter on the Ledger must at all times equal the whole credit matter; if it do not it is certainly erroneous. Hence the utility of taking a Trial Balance, which is commonly done every month, to test the accuracy of the Ledger. The exercises given for analysis in the preceding section are all "Trial Balances."

CONTINUATION OF EXERCISE I.

The student is required to post the entries of the month of January into the proper Ledger accounts (see blank Ledger), and show a Trial Balance.

Transactions from Day Book.

I find the following transactions recorded on my Day Book during the month:

1. I have given my note to Wm. Brown, payable in thirty days, for \$500.
2. I have received John Wilson's note at two months for \$800.
3. I charge John Wilson for cartage, labour, and postages, \$3.

JANUARY 31st.

Transactions from Cash Book.

On reference to my Cash Book, I find I have received cash during the month as follows, viz. from John Wilson on account, \$350; for merchandise sold, \$1,850; for notes that have become due, \$2,500. Total cash received, \$4,700. I have paid cash during the same period as follows, viz. for fuel, \$54; cartage, \$32.43; labour, \$25.18; for merchandise bought, \$2,573.24; for my own notes become due, \$374.20. Total payments, \$3,559.05.

Transactions from Invoice Book.

On reference to my Invoice Book, I find I have purchased during the month merchandise as follows, viz. from Wm. Brown on book account, \$1,560.24; from sundry persons, for which I gave my notes, \$5,824.32. Total purchased, \$7,384.56.

Transactions from Sales Book.

On reference to my Sales Book, I find that I have sold merchandise during the month as follows, viz. to John Wilson on account, \$587.50; to sundry persons, for which I have taken their notes, \$6,978.24. Total sales, \$7,565.74.

BUSINESS TRANSACTIONS.

EXERCISE II.—FEBRUARY.

The student is required to post the following month's transactions into the Ledger Accounts, and show a Trial Balance.

Transactions from Cash Book.

I have received from John Wilson, on account, \$800. For Merchandise Cash Sales, \$1,350. For Interest on Notes discounted, \$30. For dividend on Bank Stock, \$125. For Notes that I have disposed of, \$2,570. Total Cash received, \$4,875.

My payments of Cash this month have been as follows:—Paid for Merchandise, \$1,500. For other men's Notes which I discounted, \$3,000. For discount on uncurrent money, \$3.50. For Rent of these premises, \$500. For Stationer's bill, \$136. For loss on broken bank notes, \$25. For Carpenter's bill, \$32.78. For Cartage, \$25.30. For Labour, \$50. For my own Notes become due, \$5,354. Total Cash paid, \$10,626.58.

Transactions from Invoice Book.

I have purchased this month, from sundry persons, goods for which I gave my Notes, \$6,124.57; and from John Wilson, on Book Account, \$1,325.32. Total purchased, \$7,449.89.

Transactions from Sales Book.

I have sold goods to sundry persons, for which I have received their Notes, \$7,340.22; and to Wm. Brown, on Book Account, \$4,150.24. Total sold, \$11,490.46.

Transactions from Day Book.

Received from Wm. Brown his acceptance of our draft for this amount, \$1,531.55. Accepted John Wilson's draft on me for this amount, \$791.09. John Wilson's account is chargeable with the following—Cartage, \$5.20; Labour, \$3.50; Cooperage, \$4.23. Total, \$12.93. William Brown's account is chargeable with Labour, \$15.20; Postages, \$1.58. Total, \$16.78.

EXERCISE III.—MARCH.

Post the following transactions, and show a Trial Balance.

Transactions from Cash Book.

I have received Cash this month as follows: For other men's Notes due, \$3,845.20. For the same discounted, \$5,354. For Merchandise sold, \$2,153.28. From S. M. Richardson, on account, \$1,350. Total received, \$12,702.48.

I have paid Cash this month as follows, viz.—For my own Notes due, \$7,583. For Clerk's salaries, \$300. For Merchandise bought, \$594. For duties on Merchandise, \$53. For Insurance, \$135. For Labour, \$29.35. For Cartage, \$15.27. To G. L. Morgan, on account, \$1,253.24. Bill for Desks and Fixtures, \$530.28. Protest on Note, \$1.75. Discount on Notes, \$23.54. Total Cash paid, \$10,508.43.

Transactions from Invoice Book.

I find on my Invoice Book the following entries of Merchandise purchased, viz.—Bought of sundry persons on my own Notes, \$4,230. From Haggerty, Draper & Jones, who received sundry other men's Notes in payment, amounting, after deducting discount, to \$3,379.80. From G. L. Morgan, on account, \$3,534.20. Total purchased, \$11,144.00.

SEC. III.—COMPILATION.

Transactions from Sales Book.

Sold S. M. Richardson, on account, \$4,260. Sold sundry persons on their Notes, \$6,120.
Total Sales, \$10,380.

Transactions from Day Book.

Received S. M. Richardson's Note for \$1,500. Allowed discount on Bills Receivable passed to Haggerty, Draper & Jones, for Merchandise bought at auction, \$52.40. Gave my note to G. L. Morgan for \$1,800. Allowed S. M. Richardson an abatement on goods damaged, \$6.24. Compromised with Wm. Brown for his note now due, and protested for non-payment, by which I lost \$574.33.

EXPLANATIONS.

In the entry on Invoice Book \$3,379.80 is the amount Haggerty, Draper & Jones take the notes for, not the full face of them. Bills Receivable will be credited also with \$52.40 from the entry on the Day Book, which, added to \$3,379.80, makes the full amount of the notes disposed of.

In the compromise with William Brown the Cash part is already entered in the Cash transactions, consequently we have only to debit Profit & Loss and credit Bills Receivable with \$754.33. It will be observed we entered \$3,845.90 as Cash received for Notes due; this included \$957.22 received on Brown's note, which was for \$1531.55.

EXERCISE IV.

The Merchandise on hand is this day valued at \$3,729.50. Bank Stock at present quotations, \$7,231.75. Required a statement of Resources, Liabilities, Profits, Losses, &c.

Balancing the Accounts.

At the end of the year, or as often as it is customary to balance the books of a business, all the secondary accounts are balanced ; thus, if we have lost by an account, we credit that account with the loss which balances it, and debit Profit & Loss account the same amount, the effect being to transfer the result of the former account to the Profit & Loss account. For example : the Charges account stands thus—

Charges.

500	.	.	.	.	.	.	.	250
250	.	.	.	.	.	.	.
300	.	.	.	.	.	.	.

Here we have lost by Charges \$800, and to balance it we credit Charges account and debit Profit & Loss account thus :

Charges.

500	250
250	By Profit & Loss 800
300	
<u>\$1,050</u>	<u>\$1,050</u>

The Profit & Loss account will also be debited thus:

Profit & Loss.

To Charges, \$800,

showing what we lost by charges. Accounts showing a gain will require to be debited, and Profit & Loss credited; and in this way all gains and losses of the business are finally collected in the Profit & Loss account.

In case of property being unsold, however, we have to enter its value on the Credit side of the account, as well as the profit on the Debit, to make it balance thus :

BALANCING.

<i>Merchandise.</i>			
Outlay . . .	3,000	Sales	4,000
" . . .	2,000	"	1,000
" . . .	1,000	By New Account (unsold)	2,500
To Profit & Loss	1,500		
	<u>\$7,500</u>		<u>\$7,500</u>
To Old Acct.	\$2,500		

The amount unsold is brought down to begin the next account with, but if all is sold there is nothing to carry to the next account.

Finally, when all gains and losses are brought into Profit & Loss account, that account is debited, and Stock account credited for the net gain, which entry closes or balances the Profit & Loss and all the Secondary Accounts, except Stock, which account will then stand thus :

<i>Stock.</i>			
Original Capital . . .	10,000		
Profit & Loss : . . .	2,500		
	<u>\$12,500</u>		

We therefore write on the Debit side, To New Account \$12,500, making it balance, and on the Credit side, underneath the footing, By Old Account, the same amount ; which is the capital for the succeeding period.

All Primary Accounts are balanced to or by New accounts for their balances, but *Personal accounts should never be balanced, except when settlements take place.*

EXERCISE V. (BALANCING.)

Balance all accounts except Personal, and bring down the balances, as exemplified. The state of the accounts if now taken off will be thus :

<i>Debits.</i>		<i>Credits.</i>	
Cash . . .	3,440.55	Bills Payable . . .	11,302.02
Bills Receivable . . .	12,821.64	G. L. Morgan . . .	480.96
S. M. Richardson . . .	1,403.76	Stock . . .	19,844.22
Merchandise . . .	6,729.50		
Bank Stock . . .	7,231.75		
	<u>\$31,627.20</u>		<u>\$31,627.20</u>

This is precisely the position in which we should place them if we now wished to commence a new set of books, and the effect of balancing has been to bring all the profits into the Stock account, and keep all the others showing the different Resources and Liabilities. (See Opening.)

NOTE. The form of balancing is most easily acquired from the board, but where that is not used the teacher will supply its place by exhibiting the form given in Teacher's Part.

SEC. III.—LEDGER FORM.

RECEIPTS.	CASH.		PAYMENTS.
RECEIVED.	BILLS RECEIVABLE.		DISPOSED OF.
			By New Account
REDEEMED.	BILLS PAYABLE.		ISSUED.
DR.	JOHN WILSON.		CR.
DR.	WILLIAM BROWN.		CR.
DR.	S. M. RICHARDSON.		CR.
DR.	G. L. MORGAN.		CR.

FOR EXERCISES I., II., III., IV. & V.

STOCK.				CAPITAL.	

OUTLAY.	MERCHANDISE.	RETURNS.

OUTLAY.		CHARGES.		RETURNS.	

OUTLAY.	INTEREST.			RETURNS.

OUTLAY.		BANK STOCK.		RETURNS.	

LOSSES.		PROFIT & LOSS.		PROFITS.	

SECTION IV.

JOURNALIZING.

THE compilation of the Journal is the most responsible and difficult task of the book-keeper. To be able to write up the Journal implies not only a thorough knowledge of the whole Ledger, but also of all the subsidiary books from which the Journal is compiled. The Journal is in reality neither more nor less than a book of directions, stating how every transaction is to be disposed of in the Ledger ; that is, what accounts ought to be debited and credited in each case.

The first entry on the Journal (see Journal, section I.) is to direct what accounts ought to be debited* and credited at the outset or opening, and as there are several accounts to be debited, the aggregate debit matter of which equals the aggregate of credit matter to be passed to other accounts, the entry is headed "Sundries to Sundries," or sundry accounts to sundry accounts. 1st. From a statement of Resources and Liabilities, it appears there is cash on hand, which, for reasons that need not now be repeated, is set down as a debit, to be carried to Cash account. The notes on hand are set down as a debit to Bills Receivable account, and so on with each item of Resources and Liabilities ; and when on completing the entry it is found to comprise a plurality both of debits and credits, it is headed "Sundries to Sundries."

The next transaction is that we have given our note to William Brown. (See section III., Day Book for January.)

The Journal entry, therefore, directs that William Brown's account shall be debited, and Bills Payable account credited, which is written :

William Brown	500,00	
To Bills Payable		500,00

The only difficulty that can now present itself to the careful student is the form and phraseology of the Journal entries ; what accounts ought to be debited and credited he has already determined in his exercises in compiling the Ledger.

The Journal entries then assume four different forms, determined by the number of debits and credits they comprise. For example :

1st Form.—A transaction or entry requiring one debit and one credit.

2d Form.—A transaction or entry requiring one debit and a plurality of credits.

3d Form.—A transaction or entry requiring a plurality of debits and one credit.

4th Form.—A transaction or entry requiring a plurality of debits and a plurality of credits.

The first business before making the Journal entry is to analyse the transaction ; that is, to determine what accounts should be debited and credited, and see that the debit matter equals the credit matter. Then by the number of debits or credits required to be made, the title and form of the entry is seen at once. For an example of the first form, see second entry of Journal, viz.

William Brown,
To Bills Payable.

For the 2d form see "*Cash to Sundries* ;" for 3d see "*Sundries to Cash* ;" for 4th see "*Sundries to Sundries*," at the beginning. Observe, that the credit entries in the *Journal* have always the word "To" prefixed ; but the debits begin without any preposition. It is also necessary to write the names of Ledger titles on the Journal in a larger hand than the explanations attached.

JOURNALIZING THE BALANCES.

After making out an Analysis or Balance Sheet from the Ledger, previous to balancing the accounts, it is necessary to make journal entries of all the Profits & Losses. For example, the Balance Sheet shows a profit on merchandise of \$7,324.05, which is journalized :

Merchandise	7,324.05
To Profit & Loss	7,324.05

Charges account shows a loss of \$1,692.88, and is journalized :

Profit & Loss	1,692.88
To Charges	1,692.88

The student, as an exercise, would do well to journalize the closing entries of all the exercises in Section II.

POSTING FROM THE JOURNAL.

Transferring the different debits and credits to the proper accounts in the Ledger is called Posting.

The operation of posting will be best explained by a few examples.

The first entry on the Journal to be posted is Cash debit \$5,857.13 ; this amount is therefore entered on the Ledger in the Debit column of Cash account. On the left is a column for the date, and next the dollar column is a small column to enter the journal page, and in the space between is written "To Sundries," indicating that there are several credits in the same journal entry.

The folio or page of the Cash account is then written in the small column on the left of the Journal, opposite the word cash. This serves to show that the item is posted, and what page in the Ledger it appears on.

We will next take one of the credits of the same entry, viz. "Bills Payable." We turn to the account headed Bills Payable, and enter on the Credit column \$5,843.24, "By Sundries," with the date and journal page, then the Ledger page being placed on the journal, it is posted.

All other items of this entry are posted in the same way.

But in the next entry, when we debit William Brown's account, we write "To Bills Payable," because there is only one balancing credit ; and in crediting Bills Payable we write "By William Brown," for the same reason.

EXAMINATION.

If I would make an entry on my Journal to debit Bills Receivable and credit Merchandise, how should I word it ?

Answer.—Bills Receivable to Merchandise.

If I would debit Merchandise, credit John Brown, and credit James Austen, how should I state it ?

Answer.—Merchandise to Sundries.

To John Brown,

" James Austen.

Is there any equality necessary between the Debit and Credits ?

Answer.—The Debit must equal in amount the sum of the two Credits.

Suppose after making a Journal entry you find the Debit and Credit unequal, what is your conclusion ?

Answer.—That there is an error.

If they do equal does it prove the entry correct ?

Answer.—No.

Why ?

Answer.—The wrong accounts may be debited or credited without affecting their amounts.

If we would debit Michael Snow and E. Nelson's accounts, and credit Merchandise account, how should we word the entry ?

Answer.—Sundries to Merchandise.

Michael Snow,

E. Nelson.

Which form of entry would this be ?

Answer.—Third form.

Why ?

Answer.—Because it has a plurality of debits, and only one credit.

If we would debit several accounts, and credit several accounts, how should we head the entry ?

Answer.—Sundries to Sundries.

 Particular transactions proposed to a class in journalizing should be performed on the black-board.

SEC. IV.—JOURNALIZING.

EXERCISE I.

Journalize the January transactions of the preceding section.

EXERCISE II.

Post the transactions of January, and take a Trial Balance.

NOTE. In heading the accounts in the Ledger the teacher will direct how many lines each account will require.

EXERCISE III.

Journalize and Post the transactions of February, and take a Trial Balance.

EXERCISE IV.

Journalize and post the transactions of March, and take a Trial Balance.

NOTE. In taking a Trial Balance the whole of the previous month or months must be included, unless the account has been balanced and ruled off.

EXERCISE V.

Make out the Analysis or Balance Sheet, journalize your profits and losses, and balance all accounts, except personal.

EXERCISE VI.

In this exercise the transactions are given in the order of dates, each to be separately journalized ; but in practice the journal is more frequently compiled from several books, viz. Invoice Book, Sales Book, Cash Book, and Day Book, there being no one book from which the Journal could be compiled. There are nevertheless some kinds of business in which it answers very well to enter briefly every transaction on the Day Book, and on the other books before mentioned the details in full are entered in addition ; but this makes more writing in Day Book, Journal, and Ledger, as will be understood from subsequent exercises. The object in view here, however, is to exercise the student thoroughly in the analysis of mixed and complicated transactions, and the phraseology peculiar to the Journal. It must also be remarked, that these are strictly exercises for the pupil, not examples of business entries in any book. Transactions are related here in such manner as seemed best calculated to insure to the student a thorough understanding of the nature of the business transacted.

EXERCISE VI.

James Strong has put into my hands the following memoranda, from which is required a Journal, Ledger, and Trial Balance for the first month.*

JANUARY 1ST, 1848.

I commence business this day as follows :

I have Cash on hand	20,000
“ “ Bills Receivable	14,000
John A. Gunn owes me	600

My Capital being	<u>\$34,600</u>
--------------------------	-----------------

2d.

Bought of L. B. Binsse & Co. goods as per Invoice Book, for which I paid in cash \$5,000.

4th.

Sold Houghton & Arnold on book account sundry goods, as per Sales Book, \$3,500.

* Where recitation of the exercise in journalizing is to be made at the board in a class, the student should prepare himself by studying each transaction previously ; and we see no objection to having the journal entries made on a slate. A pupil may not always do himself justice when the answer is hastily required.

BUSINESS TRANSACTIONS.

JANUARY 5TH, 1848.

Bought one third of the ship Europe, for which I paid cash \$12,000.

6th.

Bought of Marsh & Compton goods as per Invoice Book, for which I paid in cash \$4,000.

7th.

Bought of Houghton & Arnold on book account goods as per Invoice Book \$1,500.

9th.

Received of Houghton & Arnold cash on account \$1,500.

11th.

Bought of Greenways, Henry & Smith goods as per Invoice Book, for which I gave my note payable in ninety days \$300.

12th.

Sold John Wilmarth for cash goods as per I. B. \$1,200.

13th.

Sold Houghton & Arnold on book account, goods as per I. B. \$1,800.

Received of Houghton & Arnold cash on account \$2,000.

14th.

Sold Ira Perego goods as per I. B., for which he has granted me his acceptance, payable in sixty days, \$4,800.

17th.

Received in cash for freight of ship Europe \$2,500.

19th.

Bought of Houghton & Arnold on account as per I. B. \$10,600.

20th.

Accepted Houghton & Arnold's draft on me at ninety days for this amount \$5,000.

22d.

Bought of A. W. Spies & Co. goods as per I. B. \$4,500, for which I gave in payment my note at three months \$3,000, and paid the balance in cash \$1,500.

23d.

Paid for repairs of the ship Europe in cash \$800.

24th.

The North River Bank has discounted for me Ira Perego's acceptance, for which they gave me in cash \$4,756.80, keeping back for the discount \$43.20. Amount of the note \$4,800.

25th.

Sold Houghton & Arnold a quantity of merchandise as per Sales Book \$8,000, for which they gave me in part payment Austen & Spicer's note at three months for \$5,000; the balance to remain on account.

28th.

Shipped per Geo. Washington for London, and consigned to Johnson & Co., to be sold for my account a quantity of merchandise per "Invoice Book Outward"

amounting to	.	.	.	.	6,000
Passed my Note for Insurance	.	.	.	.	100
Paid Shipping Expenses in Cash	.	.	.	.	30
					<u>\$6,130</u>

Cash drawn for my Private Expenses . . . 500

SEC. IV.—JOURNALIZING.

JANUARY 29TH, 1848.

Sold Houghton & Arnold goods as \mathfrak{P} S. B. \$2,900, and received from them Adams & Co.'s acceptance, due 5th April, for \$3,000, on which they allowed me a discount of \$3.50, the balance, \$96.50, to be placed to their credit.

EXERCISE VII.

The Merchandise on hand this day is valued at \$1,500.

The Ship Europe is valued at \$12,000.

The Shipment to London is valued at cost.

The student is required to exhibit an Analysis or Balance sheet of the business, Journalize and post the Profits and Losses, balance all the accounts except the Personal, and bring down the balances to continue the business.

EXERCISE VIII.

Journalize and post the following month's transactions, and show a trial balance.

FEBRUARY 1st.

Sold for Cash to Peter Hawes goods as \mathfrak{P} S. B. \$800.

3d.

Sold John A. Gunn, on Book account, sundry goods as \mathfrak{P} S. B. \$680.

6th.

Bought of Marsh & Compton sundry goods as \mathfrak{P} I. B., for which I gave my note at thirty days, \$2,000.

8th.

Bought of Charles F. Stagg 20 lots on Third Avenue, for \$19,000, for which I have paid as follows :—

Haggerty, Draper & Jones's note for	5,000
S. T. Jones & Co.'s " "	6,000
My own two notes, each at 2 mos., \$4,000	8,000
	\$19,000

12th.

Bought of Tracy, Irwin & Co. sundry goods as \mathfrak{P} I. B., for which I gave my note, \$3,000.

13th.

Sold Thomas Carpenter sundry goods as \mathfrak{P} S. B., for which I received his note, \$3,000.

14th.

Received of John A. Gunn Cash in full, \$1,280.

16th.

Sold Houghton & Arnold, on account, goods as \mathfrak{P} S. B. \$780.

17th.

Bought of S. T. Jones & Co. a quantity of Merchandise as \mathfrak{P} I. B., for which I gave my note, \$8,000.

18th.

Sold J. Ramsay goods as \mathfrak{P} S. B. \$4,000, and received in payment his note at thirty days for

2,000	
Cash for the balance	2,000
	\$,4000.

20th.

Shipped \mathfrak{P} Brig Nancy to Baltimore, and consigned to Adams & Co. to be sold on my account, a quantity of Merchandise as \mathfrak{P} "Invoice Book Outward"

\$4,000	
The expenses thereon, for Insurance, Cartage, and Labour, amounted to	96.00

BUSINESS TRANSACTIONS.

FEBRUARY 21st, 1848.

Paid sundry Charges as $\text{\textcircled{p}}$ petty Cash \$180.00

22d.

I have discounted the following notes at 7 per cent.—

My own note to C. F. Stagg, due April 11th . . .	4,000
S. T. Jones & Co.'s note, " 1st . . .	6,000
Discount on \$4,000 for 48 days . . .	36.82
" 6,000 " 38 " . . .	43.72
Paid in Cash.	\$9,919.46

28th.

Bought, through W. & J. O'Brien, 20 shares American Exchange Bank Stock at \$90 $\text{\textcircled{p}}$ share	1,800
His charge for Brokerage, $\frac{1}{4}$ per cent.	4.50
Paid in Cash	\$1,804.50

"

Cash drawn for private expenses, \$250.

EXERCISE IX.

Journalize and post the following month's transactions, and take a Trial Balance.

MARCH 1st.

Paid taxes on lots in Third avenue in Cash, \$375.00.

3d.

Sold Henry Long, for Cash, Merchandise as $\text{\textcircled{p}}$ S. B. \$2,000.

4th.

Sold Willet McCord goods as $\text{\textcircled{p}}$ S. B., for which he gave me his acceptance, \$4,000, at 30 days, due 6th April.

6th.

Paid sundry Charges $\text{\textcircled{p}}$ petty Cash, \$70.00.

8th.

Sold John Wilwarth 10 lots on Third avenue at \$1,350 $\text{\textcircled{p}}$ lot.

Received in payment my note to Chas. F. Stagg . . .	4,000
On which I am allowed 33 days' discount @ 6 per cent. . .	22
	3,978
Received John Austin's note at 60 days for . . .	6,000
" Cash for the balance	3,522
	\$13,500

10th.

Bought at Auction a quantity of dry goods amounting to \$4,500.

For which I gave in payment J. Ramsay's note of . . .	2,000
On which I allowed a discount of	4.25
	1,995.75
Gave my note for	1,500.00
Paid the balance in Cash	1,004.25
	\$4,500

11th.

Paid at the North River Bank for my note of 6th Feb., due this day, \$2,000.

SEC. IV.—JOURNALIZING.

MARCH 12TH, 1848.

I have discounted Houghton & Arnold's note at 30 days for \$650 at 6 per cent., and paid	
in cash	646.45
Discount	3.55
	\$650.00

14th.

Received of Great Western from James Kelly, London, pursuant to my order, and for my account, a quantity of merchandise, amounting to invoice to £416 10s. 3¼, at 8 per cent. premium,		2,000
Paid Freight and Charges in Cash	200	\$2,200

16th.

Thomas Carpenter having failed offers 25 per cent. on his note of \$3,000, on condition that I relinquish further claim; considering it the only alternative of a total loss I have acceded. I have given up his note, and received in cash		750
My loss being	2,250	\$3,000

20th.

Sold Marsh & Compton @ 6 per cent. premium my draft at sight on Johnson & Co., London, for my account of £900 sterling.

Amount at par \$4,444 ⅔ £	4,000
Premium	240
	\$4,240

*I therefore credit Johnson & Co.

Received in payment my note in favor of Tracey, Irwin & Co.	3,000
On which they allowed me 26 days' discount	13

	2,987
Received in Cash	1,253
	\$4,240

22d.

Paid for Insurance on ship Europe	\$360
---	-------

23d.

J. Ramsay's note of 18th February due this day has been protested.

Amount of Note	2,000
Protest	1.75
	\$2,001.75

I have received his new endorsed note for \$2,011.75, interest included.

23d.

Sold Henry Long for cash merchandise as per S. B. \$1,800.

24th.

Received from Adams & Co., Baltimore, account sales of shipment of Nancy, the net proceeds being \$5,847.33.

* A debt thus contracted should always be recorded at what it will cost to pay it. Johnson charges Strong with £900, and Strong must send £900; and if it should cost more or less to buy £900 than \$4,340, the difference is gain or loss to Strong.

DETECTION OF ERRORS.

26th.			
Paid for Rent of Store (three months)	.	.	750
“ “ Clerks’ Salaries . . . . .	.	.	800
“ “ Stationer’s Bill . . . . .	.	.	127.33
			\$1,677.33

28th.			
I have negotiated my draft on Adams & Co., Baltimore, for \$5,847.33, and			
Received in Cash . . . . .	.	.	5,818.10
Discount . . . . .	.	.	29.23
			\$5,847.33

31st.			
Cash drawn from private expense . . . . .	.	.	\$700
Made up Houghton & Arnold’s account current, and find there is due them for Interest to date \$67.50.			

DETECTION OF ERRORS.

THE student having had some experience in taking trial balances, will now appreciate a few hints with regard to the detection of errors. The presumptuous may rely for awhile on their infallibility, but I have always found the most accurate and experienced accountant among those who have the least to say of their infallibility, and who are most impressed with the necessity of taking every step to check and corroborate, or, if possible, prove their work as they proceed.

Let it, then, be understood that a trial balance affords no proof of the correctness of books; if the debits and credits do not equal there is certainly error, but if they do equal there is no certainty that the accounts are correct. Charges Account may be debited instead of John Doe’s, the book-keeper, and still the accounts would be balanced, and conceal the fact that John Doe was accountable.

Before taking a trial balance, every entry should be called off by one person from the Journal, and checked on the Ledger by another. All debits should be called off throughout the books first, then all credits. Many may rely sufficiently on their accuracy to obtain a balance without this, but that does not obviate the necessity, as will appear more clearly from the following.—I have on my Ledger two accounts, both the individuals named Smith—one is named Benj. F. Smith, and the other Benj. T. Smith. My trial balances had come out even every month without the extra labour of checking, and I congratulated myself on my accuracy, on the faith of which I settled accounts with B. F. Smith, and received the balance claimed. Two months subsequently B. T. Smith called to settle, and at once pointed out an error of \$3,000, with which he was overcharged. Reference being made to the original entries, the matter was cleared up. B. T. Smith was charged instead of B. F. Smith. The T on a hasty glance may pass for an F. Now B. F. had easily overlooked an omission of \$3,000 among the numerous large items at the debit of his account, but he admits the error, and is willing to rectify so far as he can. He therefore notifies me that he is endeavouring to make arrangements with his creditors for a discharge from his liabilities on payment of twenty-five cents on the dollar! This loss would have been saved by checking. The T and the F sound entirely different, and as they were not sufficiently alike to be confounded by a person reading off, the error could not have escaped detection.

It frequently happens that, even after checking and calling off, a trial balance is not obtained; it is therefore necessary to fix upon some part of the process where it may have been overlooked—

1st.—Ascertain the amount of error, or the difference between debits and credits. Divide this amount by 9, and if nothing remains check all your accounts over again, and look particularly for some amount transposed; that is, 5,840 on the Journal may be posted 5,480, or 787 made 778: errors of this kind often escape detection several times. It is, therefore,

SEC. IV.—COMMISSION BUSINESS.

useful to know that the same figures written in any different order of succession will give a difference which is a multiple of 9, for example—

5,784
4,578
<u>9)1,206</u>
<u>134</u>

2d.—Look through the Journal for an amount corresponding with your error.

3d.—Look for an amount corresponding with half the error; an amount may be twice posted or omitted, or placed to the wrong side. If twice posted or omitted, it will be of the same amount as the difference on your trial balance, if posted to the wrong side it will be half that sum.

4th.—If your Journal is arranged with Debit and Credit columns, compare the total debits and credits with the footings of the trial balance; if not, examine all extensions on the Journal, entry by entry, and see that the debits and credits equal; and last, but not least, never trust your addition without adding both up and down.

Pupils who have had but little experience in adding and transcribing amounts, have generally a good deal of trouble in obtaining a trial balance, and are prone to lean upon the teacher for assistance, under the impression that if the error is merely an oversight they would gain time and save trouble by having their work corrected. My own experience warrants me in saying that the teacher who gives way to this argument will never make accountants. The search for errors drives the student back upon the investigation of his theory, and is the most important part of his course. He has never accomplished his object until he has obtained a complete reliance on his plan of operations; any inquiry as to what may have produced errors will afford the teacher opportunity of giving instruction at the very time when it will be appreciated and retained.

COMMISSION BUSINESS.

A LARGE amount of business is done by merchants on commission; that is, the owner consigns his goods to an agent, called a Commission Merchant, whose duties are to sell such goods to the best advantage, and account to his employer (the consignor) for the proceeds, the consignee being allowed to deduct from the total sales all necessary expenses, such as cartage, labour, freight, &c., together with a certain per centage on the gross amount of sales, called his commission. For example, we have sold goods for A.,

The gross sales being	5,845.80
We charge for Labour	15.00
“ “ Cartage	18.50
“ “ Postages	25
“ “ our Commission 5 per cent. on \$5,845.50	292.29
	<u>326.04</u>
Net proceeds due A.	<u>\$5,519.76</u>

This, with a little modification in form, is the document called an “Account Sales,” which it is the duty of the consignee to render to the owner or consignor (see Account Sales), after all the goods are sold. It is necessary, therefore, to determine how business of this nature may be disposed of on the Ledger.

1st. WHEN WE ARE CONSIGNORS.—If we consign goods to A. to sell for our account, we of course send A. an invoice of those goods; but it must be borne in mind that they are not sold to A., and therefore A. must not be debited; he only becomes indebted to us when he has realized from the Sales. We therefore debit an account headed “Consignment to A.”

COMMISSION BUSINESS.

or, if sent by sea, "Shipment to London," or elsewhere; and when we receive A.'s Account sales we credit said consignment or shipment, and debit A. with the net proceeds in his hands. The shipment then shows what it cost and what it sold for, and A.'s account shows that he owes us the proceeds.

2d. **WHEN WE ARE CONSIGNEES.**—If A. sends us an invoice of goods to sell *for his account and risk*, we do not credit his account with the amount of such invoice, for the very obvious reason that we have not bought the goods; we have not contracted any debt, nor is such invoice in any way concerned with any Ledger account; hence *we make no Journal entry of the invoice price of goods consigned to us*. We simply either copy the invoice into a book kept especially for that purpose, or into our general Invoice Book, short-extended, like cash.

We must provide, however, for making out an Account Sales when all are sold, or when such account may be required; and to do this nothing more is necessary than to open an account with A.'s sales, or A.'s consignment, and when we sell A.'s goods credit his Sales account instead of crediting Merchandise account, which is an account of our own goods. By this process, A.'s Sales account always shows on the Credit side the amount of his goods sold, the Debit being blank, except when the practice is followed of charging expenses to the Sales account at the time such expenses are paid; but it is much more general and more convenient in commission houses to make no debit to a Sales account, except large amounts of duties, freight, &c., until the Account sales is prepared, when a full estimate of all petty charges is made at once; hence in paying for labour, cartage, or insurance on A.'s sales the entry would be Charges or Insurance to Cash, as though they were paid for our own business. This presents no difficulty in practice. The amounts charged the owner are not necessarily the amounts actually paid by the agent, but such as are usually charged, and can in most instances be estimated without reference to previous entries.

We will suppose then that A.'s goods are all sold, and the Credit side of his Sales account is \$5,845.80; Debit blank.

We charge for Labour	.	.	15.00	
" " " Cartage	.	.	18.50	
" " " Postages	.	.	25	33.75
Our Commission, 5 per cent.,	.	.		292.29
Net proceeds due A.	.	.		5,519.76
Gross proceeds	.	.		<u>\$5,845.80</u>

We are now authorized to make the following entries on the Journal :

A.'s Sales	.	.	.	.	33.75	
To Charges	.	.	.	.		33.75
For Labour	.	.	.	15.00		
" Cartage	.	.	.	18.50		
" Postages	.	.	.	25		
				<u>33.75</u>		

A.'s Sales	.	.	.	.	292.29	
To Commission	.	.	.	.		292.29
For our Commission on Sales.						

A.'s Sales	.	.	.	.	5,519.76	
To A.	.	.	.	.		5,519.76
For net Proceeds due him.						

The above three debits being carried to A.'s Sales account will obviously balance it. The Charges account will show returns for what has previously been debited to it for expenses on these goods. Commission account will show our gain by commission, and A.'s account will

SEC. IV.—COMMISSION BUSINESS.

show what we must pay him. But the three entries are much more concisely stated in one, thus :

A.'s Sales to Sundries	\$5,845.80
For closing this account as per Account sales.	
To Charges	33.75
" Commission.	292.29
" A. for his net proceeds	5,519.76

So far we have treated of what may be considered the general routine of business pursued by shipping and commission merchants. But there is a great variety of business done on commission on a small scale, to which it would be absurd to apply all these formalities. For example : suppose we were to put into the hands of a Bookseller 500 copies of Jones's Book-keeping, allowing him a certain commission on the sales ; the bookseller need not open such account as Jones's Sales. It would be quite sufficient to open an account with Thomas Jones, and pass to his credit the proceeds of each sale, and charge him with expenses and commission, keeping copies of invoices, and comparing quantity remaining on hand and quantity sold, with quantity received. The same course may be pursued in numerous cases where it is not necessary to render Account sales of each particular parcel separately, and where settlements are made periodically for all sold during three, six, or twelve months. After the general arrangement and objects of accounts is once thoroughly mastered, the book-keeper must expect no other guide than his own judgment to meet these minor points ; and if he only study simplicity, and adopt whatever course appears most brief and easily understood, he will not go far astray.

EXERCISE IX.

Journalize and post the following month's transactions, and take a Trial Balance.

New York, April 1st, 1848.

Received of Patrick Henry, to be sold for account of James Kelly, London, 20 cases Linen Diaper, Linen, and Demi Linen, of I. B.

Paid cash for Duties	474.32
" " " Freight	14.40

EXAMINATION.

What is the person called who consigns goods to be sold on Commission ?

Answer.—The Consignor.

What is the person called who receives them for that purpose ?

Answer.—The Consignee.

If you consign goods to be sold in London on your account, what account do you open ?

Answer.—Shipment to London

If A., of London, consigns goods to you for sale on his account, what account would you open for the sale ?

Answer.—A.'s Sales.

How would you arrange your Ledger account of A.'s sales ?

Answer.—Credit it with all the proceeds.

What do you enter on the Debit side ?

Answer.—In some cases nothing, until the goods are all sold ; in others, Duties, Freight, &c.

What do you then enter ?

Answer.—The expenses not before charged, and net proceeds due the owner.

What then does the balance of the account show ?

Answer.—The account shows no balance ; the net proceeds and expenses must be equal to the gross proceeds.

When you pay petty expenses on A.'s goods, what account do you debit ?

Answer.—Charges.

Does not this make the Charges account show more than the actual expenses on your own business ?

Answer.—Yes.

How is this rectified ?

Answer.—By the Credit entry passed to Charges when the sales are closed.

If you receive \$5,000 worth of goods to sell for A., what Journal entry do you make ?

Answer.—None.

Where do you enter the Invoice ?

Answer.—In the Commission Invoice Book.

If you pay Cartage on A.'s goods, what entries are necessary ?

Answer.—"Charges to Cash."

Why do you not debit A.'s sales at once with the expenses ?

Answer.—It is generally found more convenient to debit all petty expenses at once, when the sales are closed.

COMMISSION BUSINESS.

APRIL 2d, 1848.

Sold Houghton & Arnold, at 8 mos., 80 pieces Linen Birdseye Diaper, as $\frac{1}{2}$ Commission Sales Book, \$253.84.

"

Sold James H. Elliott, 60 ps. Linen Diaper $\frac{1}{2}$ Patrick Henry, amounting to \$280.01, and received in payment his note @ 6 mos.

"

Sold William F. Sands, 20 ps. Linen $\frac{1}{2}$ Patrick Henry, @ 8 mos. \$234.45 ; also merchandise, $\frac{1}{2}$ Sales Book, @ 2 mos. \$253.20.

Received his note in payment for	500.00
" the balance in cash	\$317.65

3d.

Sold Daniel O. Gibb for cash, Linens $\frac{1}{2}$ Patrick Henry \$277.89.

5th.

Sold James Mason, Linens $\frac{1}{2}$ Patrick Henry, @ 8 mos. from 25th, \$124.70 ; also a quantity of merchandise, $\frac{1}{2}$ S. B. \$342.84.

Received in payment Jno. Brown's note for	250.00
Also his note for balance	\$217.54

"

Sold William Thompson, Linens $\frac{1}{2}$ Patrick Henry, at 8 mos., and received in payment his note for \$123.22.

"

Sold John Brown, at 8 mos. from 30th, 20 ps. Linen $\frac{1}{2}$ Patrick Henry, and received his note in payment \$260.50.

"

Paid sundry charges, as $\frac{1}{2}$ Petty Cash Book \$153.20.

6th.

Taken to my own account, 60 ps. Linen $\frac{1}{2}$ Patrick Henry, at 8 mos. \$405.47.

"

Paid Marine Insurance on goods $\frac{1}{2}$ Patrick Henry £470 14s. 0d., @ $\$5\frac{1}{10}\%$ $\frac{1}{2}$ £ at $1\frac{1}{2}$ per cent. \$38.83.

8th.

Sold John Wilson, 60 ps. Linen $\frac{1}{2}$ Patrick Henry, and received his note at 9 mos. \$362.40.

10th.

Sold Joshua Powers, 20 ps. Linen $\frac{1}{2}$ Patrick Henry, and received his note at 10 mos. \$225.25.

SEC. IV.—JOURNALIZING.

APRIL 15TH, 1848.

Sold Charles Fletcher, 20 ps. Linen @ Patrick Henry, and received his note at 8 mos. \$210.80.

16th.

Sold Isaac Ames, 60 ps. Linen @ Patrick Henry, and received his note at 8 mos. \$362.22.

18th.

Sold Charles E. Minor, 40 ps. Linen @ Patrick Henry, and received in cash \$492.23.

19th.

Closed sales @ Patrick Henry, and rendered Account sales.

Charged for Interest	21.34
Sundry Charges	77.76
Commission	271.12
Net proceeds to Cr. of James Kelly	2,717.21

EXERCISE X.

The merchandise on hand valued at \$5,600 ; ship Europe, $\frac{1}{3}$ \$12,500 ; Shipment to London at cost ; Bank Stock, \$2,000 ; Real Estate, \$14,000.

Make out your Analysis, journalize your Profits & Losses, and balance all accounts, except Personal.

ACCOUNT SALES.

In the following form of Account sales some explanation will be required to enable the pupil to understand it. 1st. There are twenty cases of goods sold, which are numbered from 1 to 20. Then the first sale is two cases, viz. 1 and 5. Case 1 is sold at 8 mos., and consists of forty pieces, in which there are five different qualities, numbered from 1,001 to 1,005. Then five pieces, comprising one of each quality, are called a round, or set, and as the piece numbered 1,003 is worth nineteen cents per yard, and each number above and below varies one cent per yard, the lowest is worth seventeen cents, and the highest in the round twenty-one cents ; consequently the average price of the round of five pieces is nineteen cents per yard, and there being forty pieces in the first case, there are eight rounds, containing in all 622 $\frac{1}{2}$ yds., at nineteen cents.

In case 6 there are only four rounds, or twenty pieces.

Now we may go on to fill a volume with such explanations as these, the greater part of which would be forgotten as soon as learnt. Every different business presents a variety of such details, which the most experienced book-keeper would have to learn on undertaking the accounts of a new line of business. No beginner, therefore, need be apprehensive of losing caste from betraying ignorance in these matters, they are such as none are expected to be familiar with but those brought up in the business.

We give, in addition to the Account sales connected with the last exercise, an example of an Account sale of cotton—which, although different in form, will require no further explanation.*

* Perhaps the student will think more of these documents when he is told that they represent actual transactions, and are exact copies of Account sales rendered, the latter by the eminent house whose name it bears.

ACCOUNT SALES.

Account Sales by James Strong on account of Mr. James Kelly (London),

¶ “Patrick Henry,” 1 @ 20.

[illegible]

SEC. IV.—ACCOUNT SALES.

3239

Account Sale of 108 Bales Cotton, received of "SIDDONS," Cobb, Master, from New York, and sold by order of C. H. Marshall, Esq., of New York, for account of M. Crotty, Esq., or whom it may concern.

1847		Bales.	Gross.	Dft	Tare.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										</
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SECTION V.

CASH BOOK.

THE Cash Book, as its name implies, is a record of only cash transactions; the left hand, or Dr. side, being appropriated to cash receipts, and the Cr. side to cash payments; the two sides making one folio.

Where the business is of such a nature that the transactions are partly for cash, as exemplified in the last month's transactions, the Journal is compiled from the Day Book, and the Cash Book is kept only as a memorandum, to show the daily balance of cash on hand. But in most cases the cash transactions are not entered on the Day Book at all, but journalized daily or monthly from the Cash Book, thus:

DR.		CASH.		CR.	
Jan. 1	*To Balance on hand . .	5,000	00	Jan. 1	By Merchandise, goods
" "	" Merchandise sales . .	650	00	" "	bought
" "	" Jno. Brown on account	500	00	" "	" Houghton & Arnold,
" "	" Wm. Price " "	300	00	" "	on account
				" "	" Charges, petty cash . .
				" "	" James Allen, on act. . .
				" "	" Balance
		6,450	00		
	" Balance	\$4,150	00		

Journal Entries resulting from the above.

Cash to Sundries.	Receipts this day	1,450
To Merchandise.	Sales	650
" Jno. Brown.	On account	500
" Wm. Price.	" "	300

"

Sundries to Cash.	Payments this day	2,300
Merchandise.	Goods bought	1,500
Houghton & Arnold.	On Account	500
Charges.	Petty Cash	50
James Allen.	On Account	250

It must be borne in mind, therefore, that in making entries on the Cash Book every entry is double. For example: we receive cash \$650, and enter it on the Debit side of the Cash Book; but we cannot carry this same amount into the Journal, without knowing what account in the Ledger must be credited with that sum. Hence to provide for this we write "To Merchandise," which not only explains the transaction of selling merchandise for cash, but shows also that the Merchandise account must be credited. In addition to the name of

* The Balance is never journalized.

SEC. V.—CASH BOOK.

the account to be credited, with each receipt is usually added, in a smaller hand, a few words, explanatory of the transaction. (See Cash Book, sec. I.)

EXERCISE I.

Enter the following transactions in a Cash Book, taking a whole page for the debit, and its opposite for the credit.*

MARCH 1ST, 1848.

Cash on hand this day	4,340.27
---------------------------------	----------

2d.

Bought for cash a quantity of goods, as per I. B.	780.50
---	--------

3d.

Paid charges, as per Petty Cash Book	150.00
--	--------

4th.

Paid for my note, due this day	1,000.00
--	----------

5th.

Sold merchandise for cash	2,560.42
-------------------------------------	----------

6th.

Paid for my own note of \$1,800, due 26th, and recd. the discount	4.50
---	------

Here it must be remarked, that if we entered on the Credit side of the Cash Book only the net amount actually paid, viz. 1,795.50, and wrote "By Bills Payable 1,795.50," the Bills Payable account would require an additional debit of \$4.50, to write off the note redeemed; and the Interest account would require a credit to show the gain by interest \$4.50; and we should have to enter on the Journal, Interest to Bills Payable for discount on note \$4.50, making an entry of one transaction on two different books. The same thing is accomplished in a more simple way, by entering on the Credit of Cash Book "By Bills Payable \$1,800; this puts the Bills Payable account right, but the Cash is over credited; we therefore enter on the Debit of Cash "To Interest \$4.50," and the Cash is rectified, the Interest account credited, and all is made right. It will frequently happen that such devices have to be resorted to, and the student can only prepare himself to meet such cases by considering what accounts are disturbed by a transaction, and how he may provide entries that will rectify them.

7th.

Received from Jno. Adams, on account	1,258.24
--	----------

8th.

Paid Frederick Smith, on account	584.29
--	--------

9th.

Sold for cash goods as follows:

To James Brown	587.43
" Edwd. Price	495.32
" Jno. King	384.29
	\$1,467.04

* These transactions have no reference to the business of James Strong; their object is simply to teach the process of making entries in the Cash Book.

CASH TRANSACTIONS.

MARCH 10TH, 1848.

The North River Bank has discounted Jno. King's note for	3,000.00
Discount	35.43
11th.	
Paid my note due this day at the North River Bank . .	587.53
12th.	
Received the amount of Henry Wheeler's note due this day .	970
" for Cash sales	325.24
13th.	
Received of Jno. Adams, on account	257.00
14th.	
Received for Cash sales of goods this day	1,750.82
15th.	
Paid for Stationer's bill	157.28
" " Coals	35.29
	192.57
16th.	
Paid for merchandise bought	297.23
Received for Cash sales	1,230.29
17th.	
Received from John Adams, on account	200.00
" for Cash sales	530.28
18th.	
Received for the following notes :	
George Ingersoll's	1,200
W. Seymour's	1,000
	2,200.00
" for Cash sales	857.90
19th.	
Received for renewal of William Goodwin's note	11.42
" " Cash sales	231.24
Paid for goods bought	520.64
21st.	
Paid for my note due this day	500.00
22d.	
Received for Cash sales	589.24
Paid for goods bought at auction	120.32
" Frederick Smith, on account	100.00
23d.	
I have accommodated James Brown by discounting William	
Price's note of \$753.50. Discount	12.84
Received for Cash sales	324.25
24th.	
Paid Henry Brown, on account of Frederick Smith	58.42

SEC. V.—CASH BOOK.

MARCH 26TH, 1848.

Received for Cash sales	.	.	.	.	.	.	325.24
Paid for goods at auction	.	.	.	.	.	.	976.84

27th.

Received the amount of James Thorn's note	.	.	.	.	.	.	563.40
" for Cash sales	.	.	.	.	.	.	250.75
Paid my note due this day	.	.	.	.	.	.	123.24

28th.

Received for Cash sales	.	.	.	.	.	.	324.27
" from Wm. Brown, on account of Houghton & Arnold	.	.	.	.	.	.	128.27

29th.

Received for Cash sales	.	.	.	.	.	.	257.28
" of John King, on account	.	.	.	.	.	.	150.00
Paid for goods at auction	.	.	.	.	.	.	758.24

30th.

Received of James Brown, on account	.	.	.	.	.	.	500.00
" for Cash Sales	.	.	.	.	.	.	275.00

31st.

Paid my note due this day	1,500.00
---------------------------	---	---	---	---	---	---	----------

JOURNALIZING THE CASH BOOK.

We have already exemplified and taught the process of posting from the Cash Book, Invoice Book, etc. ; and it now remains to be shown how the contents of such books may be passed through the Journal, so that the advantages of either method may be fairly estimated. In posting from the Cash Book, every separate receipt makes a credit posting to the Ledger ; but in journalizing these receipts, we may collect into one sum all the credits to be passed to any one account. For example : we may find that during the month we have received cash six times for Bills Receivable, and instead of making six credit postings to that account, we collect them all into one sum, thus—

Cash to Sundries.	Receipts this month	.	.	14,000
To Bills Receivable	4th	.	.	2,000
" " "	8th	.	.	3,000
" " "	10th	.	.	2,000
" " "	12th	.	.	1,000
" " "	21st	.	.	500
" " "	25th	.	.	1,000
				9,500
To Merchandise	14th	.	.	2,500
" "	18th	.	.	1,500
" "	21st	.	.	500
				4,500

By this means only three postings are required instead of ten, and the Ledger shows all that is wanted ; moreover, by having fewer amounts, only twelve each year, immense labour is saved in adding, checking, and calling off. The amount of mere writing, it is true,

SEC. V.—MONTHLY JOURNALIZING.

is about the same, as what is omitted in the Ledger must be written on the Journal ; but we must not forget how very much easier it is to write the whole on one place on the Journal, than to distribute it over so many different pages in the Ledger.

The following process will very much facilitate the work of making a monthly journal entry. On a piece of loose paper write down from the Debit side of the Cash Book the name of each account, to which the credit entries are assigned, taking care to write no title more than once, then note down the several dates on which the same title occurs, thus :

Cash to Sundries.
To Jno. Brown, 4th, 8th, 15th, 20th.
“ Bills Rec., 8th, 13th, 17th, 19th, 21st, 23d.

As fast as the dates are noted down, the Cash Book may be checked off with a pencil. Proceed down the debit side, and when a new ledger title occurs write it down ; but if one you have already written, merely note the date after the title. By this means you will have a complete index by which to make your journal entry ; you will see at once on what dates you are to look for credits of Jno. Brown's account, viz. 4th, 8th, 15th, 28th.

The same process is of course applicable to journalizing the Credit side of Cash Book, as well as to the Invoice and Sales Books, &c.

EXERCISE II.

Journalize the cash transactions from the Cash Book.

MONTHLY JOURNALIZING.

It will be perceived by journalizing the Cash Book, instead of posting the amounts directly into the Ledger, that a large amount of posting is saved ; and the same advantages would result from journalizing the Invoice Book, Sales Book, and Day Book, in the same way, precisely in the order exemplified in sec. I. There, however, the entries are already collected ; but the student who has once journalized a Cash Book will readily understand how to manage the details of a monthly entry made from any other book. The entries on the Ledger from this process will be so few, that a trial or balance sheet can be taken in one tenth part of the time. Now for the objections to be offered. The only serious one we are acquainted with is that the books are always a month behind, and that personal accounts are therefore not ready when wanted.

It is strange how few qualify themselves sufficiently by a general view of the principles of the Ledger to obviate so trivial a difficulty ! Why not keep the personal accounts posted up ? There is surely nothing more easy than to post daily from Sales Book, Cash Book, Invoice Book, and Day Book, all debits and credits of Personal accounts. Then in journalizing from Sales Book say—

Sundries to Merchandise	9,000
Bills Receivable	5,000
Personal Accounts <i>posted</i>	4,000

and in posting the Journal, the item of Personal accounts is at once understood as not to be posted. The same process is of course applied to the other books, for example :

Cash to Sundries	11,000
To Bills Receivable	3,000
“ Merchandise	6,000
“ Personal Accounts <i>posted</i>	2,000

SEC. V.—GENERAL ROUTINE.

The practitioner will very soon perceive that by introducing a money column on his Sales Book, Invoice Book, Cash Book, and Day Book, into which he carries all amounts he intends to post direct to Personal accounts without journalizing, he has only to add those columns and compare them with his journal entry to prove his postings, thus: In his Sales Book he finds by adding said money column that \$4,000 has been posted to debit of Personal accounts, and as that exact sum is wanted to balance his journal entry, that is to make his debits equal the credit of merchandise, he has assurance that his Ledger will balance.

We may go on to exemplify an indefinite number of forms, showing how money columns may be employed in different books to collect this or that class of items; but to the inexperienced they serve no other purpose than to mystify. A thorough knowledge of general principles, and of the nature of the business to be conducted, is all that is required to prepare even common ingenuity for suggesting any such of these expedients as we see from time to time ostentatiously heralded as new systems.

GENERAL ROUTINE

We must now say something of original entries of detail from day to day. We will suppose our business to require the following books to be used as materiel for the Journal viz.

Cash Book,
Invoice Book,
Sales Book,
Day Book, or Blotter.

If we sell a bill of goods for cash we make the entry on the Cash Book "To Merchandise." This, as has been shown, secures its being conveyed through the Journal to the Ledger, to the credit of Merchandise account and debit of Cash account. But, says the tyro, this is a sale of merchandise, and will also be entered on the Sales Book, and be liable to be journalized again. This difficulty is very commonly obviated by having a Cash Sales Book, the use of which is merely to give the minute items of detail that could not be entered on the Cash Book; that is, the quantity of the goods and prices. Hence in selling goods for cash an entry is made in the Cash Book, which, for distinction, we will call the *principal entry*, to pass it to the Journal, and the bill is copied into the Cash Sales Book, as a memorandum having nothing to do with the Journal. It may, however, be employed as a very useful check, as the total Cash sales for the month ought to agree with the credit passed to the Ledger in the monthly entry from the Cash Book. If no Cash Sales Book be kept, it is a good arrangement to have a separate column in the general Sales Book for Cash sales (see sec. I. Sales Book), and in journalizing the sales, of course all carried into the cash column is omitted. We now buy a bill of goods for cash, and, as before, make the *principal entry* on the Cash Book; but here it is also necessary to copy the invoice into the Invoice Book, and a separate column here for cash purchases will be equally useful, to avoid the chance of journalizing these transactions twice, viz. once from the Cash Book, and again from the Invoice Book.

We now sell merchandise on credit, and enter the sale on the Sales Book; this entry is sufficient, as at the end of the month we shall enter on the Journal a credit to merchandise for the total sales, and a debit to the several persons' accounts who owe for them. If they give these notes at the time of sale, or during the month, it is just as easy to enter on the Sales Book "Settled by Note," and debit Bills Receivable, instead of the person, and thus avoid opening his account on the Ledger.

We now suppose a customer comes in with whom we have an account opened on the Ledger, to give his note. This transaction we enter on the Day Book, as the principal entry. But we must also enter the note on a Bill Book, which is merely used as a memorandum of

SEC. V.—PROTRACTED SETTLEMENTS.

the date when due, and other circumstances connected (see Bill Book), but which has nothing to do with the Journal and Ledger.

We now buy goods on credit, and make the principal entry on the Invoice Book, which is sufficient; but if we at the same time give our note, and do not wish to open an account with the party, we enter "Settled by Note," and enter the note on the Bill Book.

We now give our note to a person with whom we keep an account. This entry we make on the Day Book as the principal entry, and the memorandum on the Bill Book. All entries of transactions, except those specified, would be made on the Day Book.

The transactions are now all distributed in four books, and the contents of each are entered on the Journal daily or monthly, as the nature of the business may seem to require. No precise period can be insisted upon. It is the attempt to lay down arbitrary rules in these matters, and call them systems, that has done so much to destroy the confidence of practical men in printed book-keeping. The journal entries of these four books are sufficiently exemplified in sec. I., which should be reviewed until the routine is understood. The outline of the plan, if well fixed on the mind, will readily guide the tyro in the details.

1st. All transactions of receiving or paying cash are entered on the Cash Book, and conveyed to the Ledger by a daily or monthly entry on the Journal. 2d. All transactions of selling merchandise on credit are entered on the Sales Book, and conveyed to the Ledger daily or monthly through the Journal. 3d. All transactions of buying merchandise otherwise than for cash are entered on the Invoice Book, and conveyed to the Ledger daily or monthly through the Journal. 4th. All transactions, other than those named, are entered on the Day Book, and journalized as occasion offers. Those who may prefer dispensing with a Journal, and posting from subsidiary books, have only to follow the process adopted in sec. III.

PROTRACTED SETTLEMENTS.

It is very usual to sell several invoices of goods at different times, over a period of a month or more, without taking a note until the buyer has completed all his purchases, and is about to return to a distant part of the country. His account is then made out, and the time of the several purchases averaged, and one note taken for the whole. Now in journalizing the sales, it must happen that many will be found unsettled, where no notes have been taken, and where it is not desirable to open accounts with the buyers on the Ledger. For example: we find on the Sales Book that we have sold John Brown during the month three separate parcels of goods, which we know he will settle by note in a few days, and we do not wish to open an account with him by entering "Jno. Brown to Merchandise." We therefore determine to carry all this unsettled business of a temporary character to the debit of one account, which we may with propriety term "Protracted Settlements." We therefore enter "Protracted Settlements to Merchandise" for goods sold Jno. Brown, and when Brown gives his note in settlement we enter "Bills Receivable to Protracted Settlements," for his note in settlement of his account. When all such business is settled up the account will balance; but if it shows a balance at the end of the year, it of course goes on the balance sheet as resources.*

* One objection may be offered to this course, on the ground that when the buyer calls to settle, and gives his note, there is no account on the Ledger from which the statement required can be obtained, and, consequently, it must be picked out from the Sales and other books, at the risk of items being overlooked. But this is easily obviated, by keeping a book expressly for these temporary accounts, in which an account current is opened for each buyer, and an entry made whenever a transaction occurs in relation to "Protracted Settlements." Every account may then be ready when called for. For example: if we enter on the Journal or Day Book, Protracted Settlements to merchandise for goods sold John Brown, we at the same time open John Brown's account on the book for protracted settlements, and enter on the Debit side of his account,
To Merchandise. 10 cases Prints . . . \$...

SEC. V.—GENERAL ROUTINE.

EXAMINATION.

Suppose we compile our Journal from the Cash Book, Sales Book, Invoice Book, and Day Book, where do we first enter transactions of receiving cash?—of paying cash?

What transactions are entered on the Day Book?

If you sell goods for cash, where do you enter it?

Answer.—On the Cash Book.

Must not the entry be made also on the Sales Book?

Answer.—Yes.

The same transaction is thus entered on two books, both of which are journalized; will not this transaction be thus twice entered on the Ledger, once through the Cash Book, and again through the Sales Book?

Answer.—The cash sales may be carried into an inner column in the Sales Book, and omitted in journalizing.

If you have an account opened on your Ledger with John Brown, he owing you \$2,000, and you receive his note for it, what book do you make the principal entry on?

Answer.—The Day Book.

In what form?

Answer.—

Bills Receivable	2,000	
To John Brown		2,000
Received his note for balance due.		

What other record of the note is required—and where?

Answer.—An entry of it must be made in the Bill Book, to show when it becomes due, and other particulars.

Would the Bill Book in such cases be used in journalizing?

Answer.—No.

If John Brown gave his note for goods bought, and you did not wish to keep any account with him on your Ledger, how would you make the entry?

Answer.—Enter opposite his bill on the Sales Book "Settled by Note," and make no Day Book entry.

How would the transaction be passed to the Ledger?

Answer.—Merchandise would be credited with the sales in the monthly entry, and Bills Receivable debited.

Under what head would this entry appear on the Journal?

Answer.—Sundries to Merchandise.

If you had this note discounted, and \$20 were deducted for discount, and \$1,980 paid to you in cash, how and where would you record the transaction?

Answer.—On the Debit side of the Cash Book "To Bills Receivable \$2,000," and on the Credit side "By Interest \$20."

Why not enter on the Cash Book "To Bills Receivable \$1,980," the net amount received?

Answer.—Because then an entry would be required on the Day Book "Interest to Bills Receivable \$20," otherwise the Bills Receivable would not be discharged of the whole note, nor would the interest be shown in the interest account.

Suppose you hold John Brown's note, due this day, for \$2,000, and he pays \$1,000, and gives you a new note for the balance, with \$10 interest, how would you enter the transaction?

Answer.—On the Cash Book, viz. To Bills Receivable \$990, and To Interest \$10.

If the same note had passed through your hand, and was held by a bank when it had been discounted, and John Brown gave you his check for \$1,010, and his new note for \$1,000, with which you agree to take the note up, how would you enter the transaction?

Answer.—On the Cash Book By Bills Receivable \$1,000, and To Interest \$10.

What becomes of the other part of the transaction?

Answer.—John Brown takes up half of the note himself, which I need not record on my books, except by a memorandum in explaining the entry on the Cash Book. *Explain further.* I pay \$1,000 cash, for which I received a note, and entered the transaction; I receive cash \$10 for interest, which I entered; but I carried \$1,000 to the bank for John Brown, which it was needless to enter.

If you compromise a book account owed you by Jno. Brown for \$1,500 by his paying you \$350 in cash, how would you record the transaction?

Answer.—On the Cash Book "Cash to John Brown," in settlement by compromise \$850; and on the Day Book "Profit & Loss to John Brown," for loss on his account compromised.

Total due	1,500	
Cash received		850
		650
Loss		650

How would you post the entry?

Answer.—\$650 to Debit of Profit & Loss, and \$650 to Credit of John Brown.

What is done with the other amounts in the entry?

Answer.—They are merely explanatory, and not to be posted.

What is understood by an account of Protracted Settlements?

Answer.—Accounts that are intended to be settled by note within a very short period.

What is the use of such an account?

Answer.—It saves opening a Ledger account, which would be closed again in a few days.

Give an example.

I sell John Doe goods on three months, and make the entry to-day, but he does not give his note for perhaps a week; my entry would be therefore John Doe to Merchandise, and when I got his note, "Bills Receivable to John Doe." Thus John Doe's account would be closed immediately after opening it. By having such account as Protracted Settlements I could charge all such sales to that account, and thus throw numerous accounts into one.

What would that account show?

Answer.—The amount of sales for which we had not taken notes, as agreed.

How would it be balanced?

Answer.—It would balance when all had given their notes.

But should that not be the case, when you are making out your Analysis, or Balance Sheet, how would you dispose of the balance?

Answer.—Set it down as Resources.

COMMERCIAL ARITHMETIC.

SECTION VI.

PER CENTAGES.

The student is expected to be well acquainted with decimal and vulgar fractions.

Profits, losses, commissions, interest, premiums, discounts, and various other mercantile estimates, are rated as so much per cent. Thus if I lay out \$100, and receive back \$150, I gain fifty per cent (written 50 %). If I pay \$105 for stock, which is responsible for \$100, I pay five per cent. premium.

The money on which the per centage is to be taken may be called the principal.

The principal added to the per centage may be called the amount.

Case 1.—The principal and rate per cent. given to find the per centage. For example: required the commission on \$5,000 at 3 per cent.

Case 2.—The amount and rate per cent. given to find the principal. For example: how much with 3 per cent. added will make \$5,150?

Case 3.—To find an amount which after deducting a certain per centage will leave a given amount.

Case 4.—The per centage and amount given to find the rate. For example: I have \$5,150, of which \$150 is gain, what is the gain per cent. on the principal?

Solution of Case 1. \$100 principal gives \$3.00, consequently the per centage is $\frac{3}{100}$ of the principal; or, expressed in decimals, .03. Then, principal \$5,000 \times .03, gives \$150.

Hence the rule. Multiply the principal by the rate per cent. expressed as a decimal fraction. If $3\frac{1}{2}$ per cent., .035; if $2\frac{3}{4}$, .0275, and so on.

Solution of Case 2. The amount \$5,150 is composed of principal and per centage, which we wish to separate. Suppose then we count from the sum \$100, and set it apart as principal, and \$3 as premium, and so go on until we have told out the whole sum; we shall then have a practical solution, and our answer will be as many \$100 as we were able to lay down \$103. By division, then, we find we could do this fifty times, and our answer is fifty times one hundred, or 5,000.

Hence divide the amount by \$1, with per centage added, as 1.03.

This is sometimes called *discount on the dollar*, to distinguish it from *discount in the dollar*, which we call Case 3.

For example: I have \$5,000 due me in Vera Cruz, when exchange is 3 per cent. discount, and my correspondent desires me to draw on him for as much as will give me the debt in full. For how much must the bill be drawn?

Solution. We can sell a bill of \$100 for \$97, hence if the debt were \$97 we must draw for \$100; the debt therefore is $\frac{97}{100}$ of the sum drawn for, and the sum drawn for is $\frac{100}{97}$ of the debt. Hence debt $\$5,000 \times \frac{100}{97} = \5154.63 answer. Or, we must draw for \$100 every time we find \$97 contained in \$5,000, and for \$1 one hundred times as often as for \$100; that is as often as 97 is contained in 100 times 5,000.

To find discount in the dollar we therefore multiply the given amount by 100, and divide by 100 less the rate.

Solution of Case 4. The outlay was \$5,150 less gain \$150 = \$5,000, then how much per cent. does \$150 give on \$5,000. First divide the principal into shares of \$100 each, and we have fifty shares; then the gain must be divided into so many parts as there are shares of \$100, and $150 \div 50 = 3$. Answer 3 per cent.

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Hence to find the rate per cent. we may divide the per centage by $\frac{1}{100}$ part of the principal; but it will be the same in result, and easier in practice, to multiply the per centage by 100, and divide by the principal.

For fractions of one per cent. express the one per cent. thus, .01; then divide for any fraction required thus, for one-third per cent.,

$$\begin{array}{r} 3) \cdot 0100 \\ \hline \cdot 0033 \\ \hline \end{array}$$

QUESTIONS.*

1. What is my commission on \$3,750.43 at $2\frac{1}{2}$ per cent.?
- The student who is familiar with fractions will often be able to abbreviate, thus $2\frac{1}{2}$ is $\frac{5}{2}$ of 100; hence divide principal by 40, or 5 per cent. is the $\frac{1}{20}$ principal, &c.
2. Bought merchandise for \$5,643.20, how much must I sell it for to gain $3\frac{1}{2}$ per cent.?
3. Sold merchandise for \$8,440.52, and gained $8\frac{1}{2}$ per cent., what did it cost?
4. Bought goods for \$2,350.84, which I sold for \$2,897.32, what was my gain per cent.?
5. Bought 584 yards of broadcloth for \$1,752.25, paid charges, freight, &c. \$68.23, and duties 30 per cent., at how much per yard must I sell it to gain 15 per cent.?
6. Sold goods at \$4.62 per yard which cost \$4.02, how much per cent. did I gain?
7. Sold cloth at 65 cents per yard which cost 83 cents, how much per cent. did I lose?
8. I owe Richard Roe, of New Orleans, \$2,000, which he desires me to pay by buying a bill on that place, and remitting. I am to charge $\frac{1}{2}$ per cent. commission on the amount I pay for the bill. How much do I pay, and what is my commission?
9. John Doe, of Mobile, owes me \$3,154.20, payable in New York funds. He instructs me to draw on him to settle the debt, when bills on that place sell at $1\frac{1}{2}$ per cent. discount. How much must I draw for to give me the amount in full?
10. I owe Charles Macgregor, Vera Cruz, \$3,500, which I am desirous of remitting when exchange on that place is $1\frac{1}{2}$ per cent. discount. I am to charge $\frac{1}{2}$ per cent. commission on the amount I pay for the bill, and my remittance must settle the account. What is the face of the bill, how much the commission, and how much cash do I lay out?

* It will very much facilitate many of these operations when the student is informed, that if a fraction occur in his divisor he may reduce both dividend and divisor to the same relative value. Thus divide 346 by $24\frac{1}{2}$.

$$\begin{array}{r} 24\frac{1}{2} \\ 4 \\ \hline 97 \end{array} \qquad \begin{array}{r} 346 \\ 4 \\ \hline 1384(14. \end{array}$$

That is, the whole is reduced to 4ths, and we divide 1384 by 97

Again, we want to divide 3542.26 by $100\frac{1}{2}$,

$$\begin{array}{r} 100\frac{1}{2} \\ 2 \\ \hline \end{array} \quad \text{Then} \quad \begin{array}{r} 3542.26 \\ 2 \\ \hline \end{array}$$

Divisor reduced 201 $7084.52(3523.64$

100 divided by $\frac{1}{2}$ of 20 is the same as 400 divided by the whole of 20. Any sum divided by another sum may be expressed as a fraction. Thus 100 divided by 20 may be expressed $100 \div 20$, and every tyro knows that a fraction is not altered in value if we multiply both terms by the same number. Thus $100 \div 20$ is the same as $500 \div 100$, or they give the same quotient, viz. 5.

† The per centage of Profit & Loss is always estimated on the amount laid out.

SECTION VII.

INTEREST.

INTEREST is a per centage allowed for the use of money according to the time for which it is retained: it is negotiated and quoted as so much per cent. per annum. Thus, if we borrow \$100, and pay every year \$6.00 for the use of it, we pay 6 per cent.; but for any portion of a year we should pay a similar portion of the per centage—thus, for half a year we must pay half of 6 per cent., or for two-thirds we pay two-thirds of 6 per cent. Suppose, then, we borrowed \$5,000 for nine months, we may first find the interest for a year, which is \$300, and then deduct a quarter for the three months, wanting=\$225. Or we may say one year gives 6 per cent.; hence three-quarters of a year gives three-quarters of 6 per cent., or $4\frac{1}{2}$ per cent., and $4\frac{1}{2}$ per cent. on \$5,000 is \$225.

Hence, in calculating interest for part of a year, we may take the requisite part of the year's per centage, or the same part of the rate; or in other words, we may either proportion the rate or the per centage to the time as best suits our convenience.

Parts of a year are sometimes computed in days, and sometimes as months and days, for example—the time from January 12th to March 17th is, counting the days—

January	.	.	.	.	19
February	.	.	.	.	28
March	.	.	.	.	17
					64

but it is often called 2 mos. 5 days; that is, to Feb. 12th, 1 month; March 12th, 2 months; to 17th, 5 days more=2 months 5 days.

Now a month, being the twelfth part of a year, is $30\frac{1}{2}$ days; consequently 2 months 5 days= $65\frac{1}{2}$ days, whereas the actual number of days between the two dates is 64, as above. We will now, however, compare two other dates, say from June 12th to August 17th—

Actual days	.	.	.	.	66
2 months 5 days =	.	.	.	.	$65\frac{1}{2}$

so that in this case the months and days give a less portion of a year than the actual days intervening. Hence the computation by months and days gives more than the actual days for February, April, June, September, and November, all these months having less days than $30\frac{1}{2}$; but all other months having more days than $30\frac{1}{2}$, to compute them by months and days, gives less than the actual time.

It follows, then, from these premises, that Interest accounts made up in months and days will vary a little from those made up in days. Computing each day as $\frac{1}{365}$ of a year, the method of months and days gives more or less than the days, but they can never be equal unless by a very singular coincidence. But days are often computed as the $\frac{1}{360}$ of a month or $\frac{1}{360}$ of a year, and then the difference between the two methods of computation is considerable, as the latter gives $\frac{1}{360}$ more than the actual time. The most correct computation of time for parts of a year is the actual number of days; but when days are computed as $\frac{1}{360}$ of a year, as is commonly done for 6 per cent., then months and days give nearer the truth. For example: A makes out an account against me for interest at 6 per cent., in which he computes the actual number of days, and then charges each day as $\frac{1}{360}$ of a year; but I may

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very properly require him to compute months and days, for then I get $30\frac{1}{2}$ for each month instead of 30 days, or at least it will average that nearly. In this way I shall pay very little more or less than the actual interest, at 365 days to the year, but on the former method I pay $\frac{1}{3}$ too much.

Interest 6 per cent.

Interest at 6 per cent., for parts of a year, is most readily computed by taking parts of the rate, thus—

12 months gives 6 per cent., hence 2 months gives $\frac{1}{3}$ of 6 per cent., or 1 per cent. Two months is called sixty days, hence for every sixty days we may take 1 per cent. of principal. To take 1 per cent. we have only to point off two places from the dollars of principal, and consequently we have always the interest for sixty days on any amount at sight. Thus, the interest for sixty days on \$3,142.24 is \$31.42; and again, the interest for six days is $\frac{1}{10}$ of the amount for sixty days, or \$3.14—so we have always the interest for six days by pointing off three places from the principal.

Required the interest of \$5,234.24 for 99 days?

Solution.

	52,342	. . . .	Interest for 60 days.
$\frac{1}{2}$ of 60 days	26,171	. . . .	" " 30 "
	5,234	. . . .	" " 6 "
	2,617	. . . .	" " 3 "
	<u>86,364</u>	. . . .	" " <u>99</u> "

Now, as we have always the interest for sixty or six days by inspection of the principal, we can make from these any amount of days, thus—24 days=4 times 6 days—for 120 days twice 60—and for 22 days $\frac{1}{3}$ of 60=20, and $\frac{1}{5}$ of 20=2, thus—

3)5,234.24	
<u>1,744.74</u>	20
174.47	2
<u>\$19,19</u>	Ans.

Observe, if you have 20 days, and want 2, it is $\frac{1}{10}$, and $\frac{1}{10}$ is always obtained by writing the same figures one place further to the right. Much practice is needed to become expert in this process.

As this computation is based on 360 days to the year, it is of course $\frac{1}{3}$ more than 6 per cent., but custom appears to have established it, although we think it should be restricted to parts of one month.

For months and days interest at 6 per cent., the months are computed by multiplying 100th of the principal by half the number of months, thus:

Required the Interest for 5 months 7 days at 6 per cent. on \$3,854.29.

Principal + 100 =	38,5429	
	$2\frac{1}{2}$ half number of months.	
	<u>77,0858</u>	
	19,27	
	<u>96,356</u>	5 months,
	3,854	6 days,
	642	$\frac{1}{2}$ of 6 days,
	<u>\$100,85</u>	Answer.

COMMERCIAL ARITHMETIC.

EXERCISE I.

Required the total amount of interest on the following account to July 1st, at 6 per cent., in days, computing 360 days to the year.

		<i>Amount.</i>	<i>Days.</i>	<i>Interest.</i>	<i>Mo.</i>	<i>Days.</i>	<i>Interest.</i>
Jany.	4th	538.24	178	= 15.967	5	27	15.84
"	19 "	1,342.29					
Feby.	6 "	978.24					
"	10 "	1,432.50					
March	2d	847.29					
"	10th	1,236.84					
March	18th	876.29					
April	6 "	576.23					
"	18 "	1,650.00					
May	12 "	765.00					
"	24 "	1,750.24					
June	10 "	978.29					
"	14 "	1,875.28					
July	1st	157.89					

EXERCISE II.

Compute interest on the above for months and days.

INTEREST AT SEVEN PER CENT.

Interest at 7 per cent. must be computed for 365 days to the year, hence it is usual to compute first 6 per cent. 360 days, add $\frac{1}{4}$, and deduct $\frac{1}{4}$, thus:

Required the interest of \$538.24 for 178 days, @ 7 per cent.

Interest of \$538.24 for 178 days @ 6 per cent. is	15,967	
$\frac{1}{4}$	2,661	
	<hr/>	
	18,628	
$\frac{1}{4}$	255	
	<hr/>	
	\$18,373	<i>Answer.</i>

But this operation is tedious, and is much more easily performed thus:

Short method of computing 7 per cent. interest for days.

Obtain the interest at 6 per cent. for 360 days for first line; write the same figures one place to the right underneath for second line; and half that amount for third line. Write the last amount two places to the right for fourth line, and its half for fifth line. The sum of these is the interest required.

15.967	Interest at 6 per cent.
1.5967	" " $\frac{1}{4}$ " "
7983	" " $\frac{1}{2}$ of do.
79	" " $\frac{1}{4}$ of last
39	" " $\frac{1}{2}$ of $\frac{1}{4}$
<hr/>	
\$18,3738	<i>Answer.</i>

SEC. VII.—INTEREST.

NOTE. If the interest at 6 per cent. $\$360$ days be 1, the interest at 7 per cent. $\$365$ days will be 1,1507. Hence the above process is only a short method of obtaining the product by 1,1507.

INTEREST AT SEVEN PER CENT. FOR MONTHS AND DAYS.

WHEN accounts are made up in months and days at 7 per cent., the months are computed as 12ths of a year, and the days as 365ths.

FOR MONTHS.—Compute the interest for a year, and take fractional parts, thus :

Required the interest on $\$538.24$ @ 7 per cent. for 5 mos. 27 days.

538.24	or this way :	2)37,676	Interest 1 year.	
.07				
37,67.68	Interest for 1 year.	18,838	“ 6 mos.	
5		3,139	“ 1 mo.	
12)188,380		\$15,699	“ 5 mos.	
\$15,699	$\frac{1}{12}$ of 1 yr. or 5 mos.			

Then for the days	5,382	60 days	
	2,691	= 30 “	
	269	= 3 “	
	2,422	27 “ 6 per cent.	
	242		
	121		
	1		
	2,786	= “ “ 7 per cent.	
	15,698	= 5 months.	
	\$16,484	Answer.	

The computation for months and days @ 7 per cent. is tedious, and it is not uncommon to compute the whole at 6 per cent. 360 days, and add $\frac{1}{12}$; but that method, so far as days are concerned, gives $\frac{1}{12}$ too much interest. It is therefore usurious, 7 per cent. being the limited rate in this state.

NOTE. To compute interest or per centages on sterling, or any foreign currency, first reduce the currency to a decimal expression, and then proceed as with dollars and cents.

EXERCISE I.

Compute the interest on the foregoing account in days @ 7 per cent.

EXERCISE II.

Compute the interest on the foregoing account in months and days @ 7 per cent.

SECTION VIII.

EQUATION OF PAYMENTS.

THE object to be attained in equating payments is to find the proper time for paying a whole sum, the several parts of which are due at different dates. For example:
I owe \$300, which is due as follows

\$100 due this day,
100 " in one month,
100 " " two months.

When may the whole be paid together without loss of interest to either party?

The proper time is an intermediate date, when the interest on the money paid after it is due is equal to the interest on the money paid before it is due.* In this case it is obviously at the end of the first month, for on that day I pay 100 when it is due, 100 a month before it is due, and 100 a month after it is due.

We now compare the two modes of settlement, supposing that in each case the receiver put out his money at interest.

100 interest 2 months 1.00	300 interest 1 month 1.50
100 " 1 " 50	
100 " 0 " —	
300 Interest. 1.50	

So that in either case the interest by the time the last payment becomes due amounts to \$1.50.

From the above it is obvious, that to find an equated time we have only to inquire how long it will take the sum of all the debts to produce as much interest as the several debts would produce separately. For example:

I owe Jno. King as follows—

Jan. 10th	\$500.00
" 20	850.00
" 25	784.20
Feb. 12	1,850.00

When can the whole be paid together without loss of interest to either party?

	<i>Solution.</i>	<i>Interest.</i>
Jan. 10 500.00,	from Jan. 10 to Feb. 12 = 33 days.	2.75
" 20 850.00,	" 20 " " " = 23 "	3.26
" 25 784.20,	" 25 " " " = 18 "	2.35
Feb. 12 1,650.00,		
\$3,784.20		\$8.36

* Strict accuracy would require, when the payments are in prospective, that the interest on the sums paid after they are due shall equal the present worth of the sums paid before they are due; but this computation would be too tedious, and the error is disregarded in practice.

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Now, the interest on the sums separately would on the 12th Feb. amount to \$8.36. How long will it take \$3,784.20 to give \$8.36 interest?

Six days on \$3,784 is	.	.	.	\$3.784
One day	.	.	.	.63

$\$8.36 \div .63 = 13$ days. Hence, as we find 13 days' interest on \$3,784.20 is \$8.36, we have only to date 13 days back from Feb. 12th, which gives Jan. 30th as the equated time; we therefore deduce the following

RULE.—Compute the interest on the several debts to the last date, and find the amount of interest on all the debts. Divide this amount by one day's interest on the amount of debts, and the quotient is the equated time to count back from last date.

It very commonly happens that goods are sold at different times and different terms of credit, thus:

Jan. 10th, at 2 mos.	.	.	1,500
" 18th, " 3 "	.	.	795
" 21st, " 6 "	.	.	1,750

As a general rule, for all cases, it is better to affix to each amount the date when it is due in cash in a column ruled for the purpose. Then compute from these dates, instead of the date of the sale.

EQUATING BY PRODUCTS.

Those who do not use Interest Tables, and are not very expert at computing interest, will prefer equating by products, which is simply multiplying the time and money together, then dividing the sum of the products by the sum of the debts, thus:

			<i>Products.</i>
Jan. 10	500.00 × 33 =	.	16,500
" 20	850.00 × 23 =	.	19,550
" 25	784.20 × 18 =	.	14,115
Feb. 12	1,650.00 × 0 =	.	
	<u>\$3,784.20</u>		
			50,165 (13 days back is
			37 84 Jan. 30.
			<u>12,325</u>
			<u>11,352</u>
			. . 973

COMPOUND EQUATION OF PAYMENTS.

THE object of a compound equation is to find when the balance of an account shall take date, so as to cancel the balance due for interest. The impression made upon those unacquainted with practical accounting by the manner in which the subject is commonly treated, viz. that the object is to substitute one payment in prospective for several payments in prospective, is entirely erroneous; in perhaps half the cases to which equation is applied all the debts are past due. How, then, it will be asked, can we pay the whole at the average date when that date is past? The idea is an absurdity, but we can find when the whole shall take date, for example: I have sold goods for John Brown 100 different times through the past year, and wish to find when I can pass to his credit the whole amount so as to do him justice. The time will obviously be sufficiently back to give as much interest as the interest on the several sums computed singly. Suppose the total amount sold to be \$2,000, and the interest to amount to \$40 more, by making the \$2,000 take date four months back, I do what is equivalent to passing to his credit \$2,040, whereas if I passed \$2,040 to his credit this date,

SEC. VIII.—EQUATION OF PAYMENTS.

and the account were allowed to run on, I should be giving him compound interest, which the law would not sustain. The student must therefore learn to look upon dates as all-important, and the altering dates back or forward as the same thing with giving or taking interest.

Let us now suppose I copy from my Ledger John Brown's account, examining all minutely, and dating each item when it was due in cash. We will also suppose that the day on which we do this is 25th January, and we propose to make up his account to this date. We therefore compute the interest on every sum, both debit and credit, up to this date, and insert it in a column opposite its amount and number of days, thus :

CASE I. (*Balance dated backward.*)

DR. JOHN BROWN IN ACCOUNT CURRENT WITH THOMAS JONES. (TO JAN. 25TH.) CR.

1848			d'ys	int.	rest		1848			d'ys	int.	rest	
Jan.	1	To Merchandise	24	4 00	1,000 00		Jan.	6	By Merchandise	19	6 33	2,000 00	
"	5	"	20	5 00	1,500 00		"	8	"	17	2 83	1,000 00	
"	15	"	10	2 00	1,200 00		*		Balances		3 34	3,500 00	
"	20	"	5	1 50	1,800 00								
"	25	"			1,000 00								
				\$ 12 50	6,500 00					\$ 12 50		6,500 00	

Now the balance due for interest is \$3.34, and the balance due on the account is \$3,500 ; the question, therefore, is how far back must we date \$3,500 to give \$3.34 interest. One day's interest on \$3,500 is \$0.583, and this is contained in \$3.34 $5\frac{7}{8}$ times, which we call six days, and six days back from 25th Jan. is 19th Jan., the date required. Insert this date then opposite the balance, and $5\frac{7}{8}$ days in the column of days, and the account speaks for itself, as no other date would make the interest on both sides balance.

If then the account is settled 25th January, John Brown must pay \$3,503.34 ; but if the account runs on, then the new account is charged \$3,500, dated 19th January.

CASE II.

It will often happen that the balance of an account has to be dated forward. For example :

John Brown owes me \$1,000, and \$10.00 in addition for interest, and on the day I make out his account I buy goods from him amounting to \$2,000 ; the account, therefore, this day, January 25th, stands thus :

DR.			JOHN BROWN.	CR.		
Nov. 25.	To Merchandise	1,000		Jan. 25.	By Merchandise	2,000
	2 mos. int.	\$10.00				

Now I obviously owe John Brown \$1,000, but he owes me interest \$10.00, and as I prefer holding the balance to receiving the \$10.00, it is evident that I have a right to keep the balance due, viz. \$1,000, just as long as he kept my \$1,000, viz. two months, and the balance will then be payable two months forward, or March 25th. The account, if then made out, will stand thus :

DR.			JOHN BROWN.	CR.		
Nov. 25.	To Merchandise	1,000		Jan. 25.	By Merchandise	2,000
	4 mos. int.	\$20.00			2 mos. int.	\$20.00
Mar. 25.	To Cash Balance	1,000				
			\$2,000			\$2,000

SEC. VIII.—COMPOUND EQUATION BY PRODUCTS.

It will now be perceived that there are two cases, the one requiring the balance to be dated back, and the other requiring it to be held over; the ground on which they differ being that in the one the balance of interest and balance of account are either both payable or both receivable, that is, they are both on the same side of the account; but in the other case, they are on opposite sides of the account, that is, the balance is to be received, while the balance of interest is to be paid, or vice versa. To exemplify still more fully we give the following account, where the balance is dated forward.

CASE II. (*Balance dated forward.*)

DR. JOHN BROWN IN ACCOUNT CURRENT WITH THOMAS JONES. (TO JAN. 25TH.) CR.

1848						1848					
Jan.	1	To Merchandise	24	4 00	1,000 00	Dec.	7	By Merchandise	49	16 33	2,000 00
"	5	"	20	5 00	1,500 00	1849					
"	15	"	10	2 00	1,200 00	Jan.	8	"	17	2 83	1,000 00
"	20	"	5	1 50	1,800 00	"	"	Bal. of Acct.			3,500 00
"	25	"			1,000 00						
		" Bal. of Int.		6 66							
			\$	19 16	6,500 00				\$	19 16	6,500 00
		To Balance			3,500			By Interest			6 66

Here it appears John Brown owes me \$3,500, but I owe him \$6.66 interest. Now it is evident that he may hold back this \$3,500 until the interest comes to \$6.66; then \$6.66 + .583, or one day's interest, gives 11.4 days, and eleven days forward from 25th Jan. gives Feb. 5th, the date required. If John Brown settles the account 25th Jan. he pays \$3,500, less \$6.66, but if he takes the equated time he pays \$3,500, Feb. 5th. From the foregoing we therefore deduce the following rule for finding when the balance of an account takes date:

RULE.—Compute the interest on both sides to the day of making up the account.

Insert the balance of interest and balance of account, making all the columns balance.

Divide the balance of interest by one day's interest on the balance of account, and the quotient is the number of days to be counted back or forward.

If the balances of interest and amounts are on the same side of the account count backward, if otherwise count forward.

COMPOUND EQUATION BY PRODUCTS,

THE process is merely substituting the product of the money and time for the interest, as before exemplified, and dividing the balance of products by the balance of the account. The quotient is the equated time. Thus:

DR. JOHN BROWN IN ACCOUNT CURRENT WITH THOMAS JONES. CR.

1848						1848					
Jan.	1	To Merchandise	24	24,000	1,000 00	Jan.	6	By Cash	19	38,000	2,000 00
"	5	"	20	30,000	1,500 00	"	8	"	17	17,000	1,000 00
"	15	"	10	12,000	1,200 00	"	"	Balances		20,000	3,500 00
"	20	"	5	9,000	1,800 00			20,000 ÷ 3,500 =			
"	25	"			1,000 00			5 $\frac{2}{5}$ days			
								or 6 days back =			
								Jan. 19th			
			\$	75,000	6,500 00				\$	75,000	6,500 00

If the balance of products and balance of the account are on different sides count forward.

SEC. VIII.—EQUATION OF PAYMENTS.

EXERCISES.

1. The Debit side of an account made up to July 1st is \$2,500, interest \$24.62, the Credit side \$3,200, interest \$29.38, when shall the balance take date?

2. I have sold goods for John Doe, amounting \$5,843.22. The interest computed on each sale to January 1st is \$150.24. The expenses chargeable on said goods for duties, freight, commission, labour, &c., are \$856.24; and interest to date January 1st \$39.56. When do the net proceeds take date?

3. Sold Richard Roe the following merchandise: Jan. 10th at 3 mos. \$1,350; Jan. 15th at 4 mos. \$1,875.20; Jan. 14th at 3 mos. \$1,824. He calls to settle Jan. 20th, and pays in cash \$500, and gives his note for the balance. When must that note fall due?

NOTE. It will often happen in equating an Account Sales that the whole can be reduced to a simple equation by cancelling from the sales enough to cover the charges, where there happens to be a sale on same date that the charges are due.

SECTION IX.

DISCOUNT.

If we pay a debt a year before it is due we ought, in strict equity, to pay a sum which, with a year's interest added, will amount to the debt. For example: we owe \$106, due in one year from this time, interest at 6 per cent. Now it is obvious that \$100 paid now discharges the whole debt, for that \$100 placed at interest one year amounts to \$106. The present worth then is $\frac{100}{106}$ of the debt for a year at 6 per cent., for half a year $\frac{100}{103}$, or for two months $\frac{100}{101}$, and so on.

Then the present worth of \$100 due a year hence at 6 per cent. is not \$94, for that would be making the present worth $\frac{94}{106}$ of the debt, whereas it is $\frac{100}{106}$, or \$94.34, which with 6 per cent. added, gives \$100. To find the present worth, then, of a sum due at a future time we adopt the following

RULE. Divide the debt by \$1, plus the interest of \$1 for the time, and the quotient is the present worth.

The correctness of this rule may be thus demonstrated: Suppose we require the present worth of \$1,000, due in one year at 6 per cent. Now we have in hand \$1,000, from which we lay down \$1 as present worth, and apart we set down .06 (six cents) as interest of the same for one year; it is obvious that the \$1 discharges \$1.06 of the debt. Now we lay down another dollar as principal, and six cents as interest, and so proceed until we have told out the whole; we shall then have the money divided into two parts—the one being discount, the other the present worth—and the present worth is obviously \$1 for every \$1.06 we counted out, and $\frac{1000}{106} = \$943.40$.

As it is somewhat tedious to find the interest of \$1 for a fraction of a year we subjoin the following:

Interest of \$1 @ 6 per cent. one mo.	.005,	one day	.0001 $\frac{2}{3}$
" " " " 7 " " " "	.005 $\frac{1}{4}$,	" "	.00019178

To find the divisor for months multiply the expression for one month by the number of months required, and add \$1. If days are wanted multiply the expression for days. For example, what is the divisor for 3 mos. 24 days, 7 per cent.?

.005 $\frac{1}{4}$ × 3	=	17 $\frac{1}{4}$ or .0175
.00019178 × 24	=	.0046
Then add		1.00
Divisor		<u><u>\$1.0221</u></u>

Discount should always be proved by computing interest on the present worth, and thus answering the conditions by producing the debt. For example, required the present worth of \$7,315.24 for 3 mos. 24 days 7 per cent.:

\$7,315.24 ÷ \$1.0221 = \$7,157.07 present worth.

Proof. \$7,157.06 @ 6 per cent. 3 mos. 24 days = \$158.18 + \$7,157.06 = \$7,315.24.

SEC. IX.—DISCOUNT.

QUESTIONS.

1.	Required the discount of	\$556.61	178 days	7 per cent.
2.	" " present worth of	1,380.77	5 mo. 22 days	6 " "
3.	" " " " "	1,471.65	4 " 21 "	7 " "
4.	" " " " "	1,263.41	112 " "	7 " "
5.	" " " " "	891.48	104 " "	6 " "
6.	" " " " "	1,761.32	38 " "	6 " "

SECTION X.

ACCOUNTS CURRENT.

AN Account Current is a statement of all transactions for and against some firm or individual with whom we have had dealings; it is similar to the Ledger account in its general features, but not a copy of it. The account in the Ledger should rather be looked upon as an index, by which we may find all particulars for the Account Current: Each item of debit and credit on the Ledger must be traced back to its original source, whether the Journal or elsewhere, so that it may not only be clearly and fully described, but that the true date may be also affixed. The date on the Ledger is the date when the transaction took place, but the day when it takes date in account is the day when the item is due in cash. For example: I may on the 10th Jan. buy goods from Jno. Brown at two months' credit, \$1,000, which would be dated on the Ledger 10th Jan., but in Account Current the item would *take date* 10th March. Hence the first point is to ascertain carefully when each item takes date. Then a full explanation must be given to each item, instead of "To Sundries," "To Bills Payable," &c. Such phrases appear ridiculous in an Account Current.

JAMES MORRISON IN ACCOUNT CURRENT AND

Dr.

			Days.	Interest.		
1848						
Jan.	10	To our acceptance of your draft at 2 months, due March 13th	100	9 66	580	00
"	15	To Merchandise at 3 months' credit, due April 18th	64	19 97	1,873	00
"	7	To Brown & Co.'s acceptance, our draft at 3 months, due April 10th	72	28 08	2,340	00
Feb.	24	To our note at 2 months, your favour due April 27th	55	7 97	870	00
Mar.	12	To your order in favour of James Thompson	101	12 36	735	00
"	20	To Cash	93	8 92	576	00
"	29	To Net Proceeds Consignment of "Jane," as per Account Sales	84	67 65	4,832	79
June	21	To Interest	—	—	154	61
		To Balance to new account	—	—	1	49
					<u>\$11,962</u>	<u>89</u>

SEC. X.—ACCOUNTS CURRENT.

FOREIGN ACCOUNTS.

FOREIGN INVOICES are stated in the currency of the country they leave,—for example: a London invoice would be made out in pounds, shillings, and pence; but, having contracted a debt payable in London in pounds, shillings, and pence, it is necessary to record that debt in dollars and cents on our own books. The course we recommend is to record on our books for every foreign debt the amount of dollars and cents that will then liquidate that debt without regard to any par of exchange. The object of recording the debt in dollars is merely to show our indebtedness as nearly as circumstances admit of. When we come to settle with the parties, we restore the pounds to the account current; that is, if we owe £1 in London, and have recorded the debt at \$4.79, it does not follow that \$4.79 discharges that debt; we must send £1 to pay it, although that pound may cost us \$5. A debt must always be paid in the currency of the country where it is contracted. I may owe John Doe for goods sold here on his account \$5,000—that debt is due in dollars. John Doe may at the same time owe me for goods he sold for me in London £1,041 13s. 4d., which I recorded in my books \$5,000, and his account stands thus:

JOHN DOE.	
To Sundries \$5,000 (proceeds of my goods.)	By Sundries \$5,000 (proceeds of his goods.)

but this account is not settled, although it appears to balance. Since the time my goods were sold, or rather since the time I charged him with \$5,000, which I thought equivalent to £1,041 13s. 4d., exchange may have risen, and I may now be able to sell a bill of that amount for \$5,064.28. In making up foreign accounts current, therefore, it is necessary to have on each side two money columns, one for dollars and cents, and the other for foreign currency, and all debts that have been turned into dollars must be restored to their original form. Then, if John Doe owes pounds, he is charged pounds in the account current; and if we owe him pounds, we credit him pounds, paying no regard to the dollars on our Ledger. The balance of the columns of pounds would then be payable or receivable in London, and the balance of the columns of dollars would be payable or receivable in New York. The first

INTEREST ACCOUNT WITH JONES & Co.

CR.

			<i>Days.</i>	<i>Interest.</i>		
1848						
Dec.	10	Balance of former account due this date .	193	43	42	1,350 00
1849						
Jan.	2	By Invoice of goods at 2 months' credit, due March 5th	108	42	27	2,349 00
"	8	By our draft on you in favour of Allen & Co., at 60 days, due March 12th . .	101	29	11	1,730 00
Feb.	15	By Check on Phoenix Bank	126	20	49	976 00
Mar.	21	By Wilson & Co.'s acceptance in your favour at 30 days, due April 23d . .	59	49	15	5,000 00
"	24	By your Note at 30 days to our order, due April 26th	56	3	45	370 00
June	21	By Interest		—	—	187 89
		Errors excepted, JONES & Co.				
		New York, June 21st, 1849. .				\$11,962 89

SEC. X.—ACCOUNTS CURRENT.

is technically called "*Our Account*," the latter "*His Account*;" that is, our account with him in London, and his account with us in New York.

DR.	JOHN DOE IN ACCOUNT CURRENT WITH THOMAS JONES.	CR.
<div style="display: flex; justify-content: space-between;"> <div> To Net proceeds of my goods sold by you for To your draft on me for " Cotton shipped by me to your order </div> <div style="text-align: right;"> £1,234 18s. 6d. \$1,000.00 2,500.00 </div> </div> <div style="margin-top: 10px;"> <div style="display: flex; justify-content: flex-end;"> <div style="border-top: 1px solid black; width: 100px; text-align: right;">£1,234 18s. 6d.</div> <div style="border-top: 1px solid black; width: 100px; text-align: right;">\$3,500.00</div> </div> </div> <div style="margin-top: 10px;"> <div style="display: flex; justify-content: space-between;"> <div>To Balance due in London . . .</div> <div style="text-align: right;">£1,110 0s. 8d.</div> </div> <div style="display: flex; justify-content: flex-end; margin-top: 5px;"> <div style="border-top: 1px solid black; width: 100px; text-align: right;">500.00</div> </div> </div>	<div style="display: flex; justify-content: space-between;"> <div> By Net proceeds of your goods sold here for " your Invoice of goods shipped to my order " Balance due me payable in Lon- don " Balance due me payable in New York </div> <div style="text-align: right;"> \$3,000.00 £123 17s. 10 1,110 0s. 8 500.00 </div> </div> <div style="margin-top: 10px;"> <div style="display: flex; justify-content: flex-end;"> <div style="border-top: 1px solid black; width: 100px; text-align: right;">£1,234 18s. 6d.</div> <div style="border-top: 1px solid black; width: 100px; text-align: right;">\$3,500.00</div> </div> </div>	

Now, the value in dollars of the balance due me in London depends upon the present rate of Exchange.

The above is not given in exact mercantile phrase, as the object was to explain the nature of the account as clearly as possible.

PAR OF EXCHANGE.

PAR signifies the expression of an equivalent between two different currencies. For example: the quantity of fine gold contained in a sovereign is $\frac{4}{11}$ nearly of that contained in a half eagle, consequently the sovereign is worth \$4.87, which is the true par.

Exchange on London, however, is quoted on a merely nominal par; that is, the dollar is assumed to be equal to 4s. 6d. sterling, and when exchange is quoted at \$1.08, or \$1.09 $\frac{1}{2}$, &c., it means so much per unit of 4s. 6d., and is called 8 per cent, or 9 $\frac{1}{2}$ per cent. premium, whereas in reality exchange is at par when quoted at 9 $\frac{1}{2}$ per cent. premium. For example: 4s. 6d., or nine sixpences, costs \$1.095, and as forty sixpences make £1, we must pay for the pound Ψ of \$1.095, or \$4.87 nearly.

The rate of exchange between two places is regarded as indicating from which of the two the balance of trade is due. If exchange on London is above par, it indicates that this country has imported more than it exported, and has to pay the balance in specie; if at par, the imports and exports are regarded as equal; and if below par, it is inferred that the exports have been greater than the imports, and that the balance is to be received here in specie. This may be illustrated as follows:

Dr.	LONDON IN ACCOUNT CURRENT WITH NEW YORK.	Cr.
<div style="display: flex; justify-content: space-between;"> <div>Due New York Cotton Merchants for cotton shipped</div> <div style="text-align: right;">130,000</div> </div> <div style="margin-top: 10px;"> <div style="display: flex; justify-content: flex-end;"> <div style="border-top: 1px solid black; width: 100px; text-align: right;">£130,000</div> </div> </div>	<div style="display: flex; justify-content: space-between;"> <div>Due London Merchants from the New York Importers Balance of trade due New York</div> <div style="text-align: right;">50,000 80,000</div> </div> <div style="margin-top: 10px;"> <div style="display: flex; justify-content: flex-end;"> <div style="border-top: 1px solid black; width: 100px; text-align: right;">£130,000</div> </div> </div>	<div style="display: flex; justify-content: space-between;"> <div></div> <div style="text-align: right;">50,000 80,000</div> </div> <div style="margin-top: 10px;"> <div style="display: flex; justify-content: flex-end;"> <div style="border-top: 1px solid black; width: 100px; text-align: right;">£130,000</div> </div> </div>

Here London owes New York £130,000, and New York owes London £50,000. Hence if London shipped £130,000 in specie to pay her debt, New York must ship £50,000 of it back, which would be an obvious loss of freight, insurance, and interest. It would be much easier to order the parties in London who held the proceeds of cotton to pay over the £50,000 to the creditors of the importers, and thus save its transit back and forth. We give

SEC. X.—FOREIGN ACCOUNTS.

an individual example of the way this is effected. A., one of the cotton merchants, has £5,000 due him in London in the hands of Y., and B., an importer, owes Z., in London, £5,000. Hence A. wants to bring money from London, whilst B. wants to send it there. Now a broker brings A. and B. together to effect this arrangement. A. pays B. the equivalent of £5,000, for which A. gives him an order on Y. in London. B. then incloses this order on Y., and sends it to Z. to pay his debt, so Z. goes to Y. in London, presents A.'s order, and receives his money due from B., and Y., instead of shipping £5,000, has only to pay it over to Z. This order, then, is the document called a Bill of Exchange, and is written thus:

BILL OF EXCHANGE.

£5,000 0s. 0d.

New York, January 1st, 1849.

At sixty days' sight of this my first of Exchange (second and third unpaid*), pay to the order of B. five thousand pounds, for value received.

To Y.,

A.

Merchant,
London.

It may assist the uninitiated to take the following view of the operation of a Bill of Exchange. If he has £1,000 to receive from A., in London, and £1,000 to pay to B., in London, he has only to order A. to pay B. Now when he buys a bill it is only because he has no debtor in London, and therefore in buying a bill he buys a debt from some one else.

Now assuming that the account between London and New York stood as exemplified, the cotton merchants, or sellers of bills, would be in the market with £130,000, and the buyers, or importers, would want but £50,000. Thus the supply being greater than the demand, the price of bills must fall below par; the cotton merchant would rather sell his bill at $1\frac{1}{2}$ or 2 per cent. below par than import the specie at the cost of $2\frac{1}{2}$ per cent., and thus the price must fall, until the cotton merchants prefer importing specie, and when they have imported the whole balance due the rate must again rise to par. It can remain at par only as long as the supply of bills is equal to the demand, and when the supply becomes less, then it rises above par.

These must be regarded only as the general laws which govern the subject of foreign exchange, when drawing and remitting are confined to the legitimate purposes of commerce. Bills of Exchange are, however, like stocks, frequently speculated upon; and thus the market may rise or fall without affording any positive evidence of the state of the balance of trade; even a general want of confidence may cause bills to fall. For example: I may owe £1,000 in London when bills are selling at \$4.70 \pounds £, by which means I could pay the debt with \$4,700, but I may prefer shipping specie, although it may cost me \$4.93 \pounds £, making \$4,930. In buying a bill I run the risk of its being dishonoured, while in shipping specie I am secure from loss. In times of great distrust this feeling may put bills below par, when the balance of trade is against us.

EXCHANGE ON LONDON

is quoted at so much per unit of 4s. 6d. sterling. For example: when quoted at \$1.08 it means \$1.08 for 4s. 6d., and as \$1.00 is called the par, \$1.08 is 8 per cent. premium.

To reduce pounds, shillings, and pence to a decimal expression.

Reduce £584 11s. 10 $\frac{1}{2}$ d. to a decimal expression.

<i>Operation.</i>	<i>£584.</i>	
10s. is $\frac{1}{10}$ or $\frac{1}{2}$ =	.5	hence for the shillings take $\frac{1}{2}$ for 1st decimal,
1s. is $\frac{1}{20}$ or $\frac{1}{100}$ =	.050	for an odd shilling count 50 for next decimal, or $\frac{1}{100}$,
10 $\frac{1}{2}$ is $\frac{1}{20}$ or $\frac{1}{100}$ =	.043	
	£584.593	

The pence and farthings are first reduced to farthings, making 41. Now if 100 farthings made £1, the decimal expression would be .041, but 960 make £1, and therefore $\frac{41}{960}$ make

SEC. X.—FOREIGN ACCOUNTS.

$\frac{1}{10}$. The correction can always be made near enough by adding 1 when the farthings are over 12, and 2 when over 36. We therefore proceed by the following

RULE. Take half the shillings, if any, for first decimal, and if an odd shilling remains carry 50; if no shillings, write 0. Then reduce pence and farthings to farthings, adding 1 when 12 or over, 2 when 36 or over; to which add your 50 carried, and set down the whole following first decimal. Thus for no shillings, 31 farthings, write .032. The whole should be done by inspection, without making any more figures than the decimals required.*

EXERCISES.

Write the following as pounds and decimal fractions:

£	s.	d.	
432	13	$9\frac{1}{4}$	
12	0	8	
13	18	$7\frac{1}{2}$	
122	10	$0\frac{1}{2}$	
960	3	$6\frac{1}{2}$	
124	17	$11\frac{1}{4}$	
230	1	5	
126	16	$9\frac{1}{2}$	
	13	$4\frac{3}{4}$	
		$3\frac{1}{2}$	
<hr style="border-top: 1px solid black;"/>			
£2,023	16	$5\frac{1}{2}$	<hr style="border-top: 1px solid black;"/>
<hr style="border-top: 1px solid black;"/>			<hr style="border-top: 1px solid black;"/>
			£2,023.823

To convert pounds into dollars at par.

£1 is $\frac{4}{5}$ of a dollar, therefore multiply the pounds by $\frac{5}{4}$.† For example: reduce £184 10s. $9\frac{1}{4}$ d. to dollars at par.

Operation. \$184.539

$$\begin{array}{r}
 40 \\
 \hline
 9 \overline{) 7381.560} \\
 \hline
 \$820.173
 \end{array}$$

Answer.

To convert dollars into pounds at par.

The dollar is $\frac{4}{5}$ of a pound, therefore multiply the dollars by $\frac{5}{4}$. For example: reduce \$820.17 to pounds sterling at par.

Operation. \$820.17

$$\begin{array}{r}
 9 \\
 \hline
 4.0 \overline{) 738.153} \\
 \hline
 184,5382 \\
 20 \\
 \hline
 10,7640 \\
 12 \\
 \hline
 9,1680 \\
 4 \\
 \hline
 .6720
 \end{array}$$

Ans. £184 10s. $9\frac{1}{4}$ d.

* The author does not claim this as new; it is to be found in several English arithmetics. He does not know who is entitled to credit for it.

† When we have a fraction for a multiplier it is always understood that we are to multiply by the numerator, and divide by the denominator.

SEC. X.—FOREIGN ACCOUNTS.

To convert pounds into dollars at a premium or discount.

EXAMPLE.—What will £184 10s. 9½d. amount to when exchange on London is 8½ premium? The price paid for 4s. 6d. Sterling at par is 1 dollar, at 8½ per cent. premium it is 1.08½.

In dollars at par as above	\$820,173
Price paid for 4s. 6d.	108½
	6561384
	820173
	41008 ½ of 82017
	20504 ½ of last

Ans. \$891,938

RULE.—Reduce the pounds to dollars at par, and multiply by the price paid for 4s. 6d.

To convert dollars into pounds at a premium.

EXAMPLE.—What amount of Exchange can I buy on London for \$891.94, at 8½ premium?

4s. 6d. sterling, if bought at par, would cost \$1.00, but I am to give \$1.08½ for 4s. 6d; therefore how many times is \$1.08½ contained in \$891.94, for just so many times can I buy 4s. 6d.

1,0875) 891.9400	(820,174 times 4s. 6d.
87000	9
.21940	40) 738,1566
.21750	184,5391
.19000	20
10875	10,7820
.81250	12
76125	9,3840
.51250	4
.43500	1,5360

Ans. £184 10s. 9½d.

RULE.—Divide the dollars by the price of 4s. 6d., and multiply the quotient by 1s.

It is very usual to sell imported goods by the pound sterling, for example—

I import goods the invoice of which amounts to £470 14s. 0d.

Exchange 9 per cent. premium, which in dollars is \$2,280.28

I pay here for duties and other charges 527.55

Making their total cost \$2,807.83

How much do I pay in dollars for an article charged in the invoice £1? How much for one shilling?

Operation.—470.7) 2807.830 (5.96

23535	
.45433	20) 5.96
42363	.298
.30700	
28242	

Ans. 1 pound \$5.96, 39 shilling 30 cts.

SEC. X.—FOREIGN ACCOUNTS.

RULE.—Convert the pounds into dollars at the current rate of exchange, and add expenses on this side. Then divide by the number of pounds for the price per pound, and that by 20 for the price per shilling.

EXCHANGE ON FRANCE

is quoted as so many francs and centimes ($\frac{1}{100}$) for the dollar of the United States. This quotation is apt to perplex the uninitiated when they hear that exchange on Havre has gone down from \$5.27 to \$5.29, but a moment's reflection will show that the more francs we get for a dollar the cheaper or lower is the rate of exchange. On London the pound is the certain and the dollar the variable money; but on France the dollar is the certain and the franc the variable.

The intrinsic par of exchange on France is 5,34535 francs for one dollar, silver for silver, but the commercial par is nearer f.5,2625, that being the amount an United States dollar will pay in France, in consequence of a seignorage of $1\frac{1}{2}$ per cent. being charged for coinage. The par, however, is disregarded in keeping accounts, as the quotations are so many francs for the dollar, and not as on London, so much per cent. above or below par.

To convert francs to dollars.

EXAMPLE.—How many dollars must I pay for a bill on France for 5824,32 francs when Exchange is f5.28 $\frac{1}{4}$?

f.5.28 $\frac{1}{4}$ cost one dollar—then how many times f.5.28 $\frac{1}{4}$ in 5824.32? for so many times must I pay one dollar.

$$5.2825) 5824.3200 \text{ (1102.568 Ans.)}$$

RULE.—Divide by the number of francs per dollar.

To convert dollars into francs.

EXAMPLE.—In \$1,102.56 how many francs and centimes at f.5.28 $\frac{1}{4}$ —one dollar is f5.28 $\frac{1}{4}$. 1102.568 is so many times 5.28 $\frac{1}{4}$, thus: •

$$\begin{array}{r} 1102.568 \\ 5.28\frac{1}{4} \\ \hline \text{Ans. f.5824,31546} \end{array}$$

RULE.—Multiply the dollars by the rate in francs.

EXCHANGE ON HAMBURG

is quoted as so many cents per Marc Banco, worth intrinsically 35 $\frac{144}{1000}$ cents. The denominations of money in Hamburg are the Marc Banco of 16 schillings, and the schilling is divided into 12 pfennings.

To convert Marcs Banco into dollars of United States.

EXAMPLE.—A of Hamburg sends me goods amounting R Invoice to 6,123m. 12s. 10pf. when exchange is at 34 cents per Marc Banco. What amount of dollars shall I pass to his credit?

$$* \frac{1}{12}) 10.00 \text{ pfennings.}$$

$$16) 12.833 \text{ decimal parts of schillings.}$$

$$\begin{array}{r} 6.123,802 \text{ marcs banco.} \\ 34 \end{array}$$

$$\begin{array}{r} 24495208 \\ 18371406 \end{array}$$

$$\text{Ans. } \$2082,09268$$

* The student who has forgotten how to reduce fractions may require to have this process explained. 6,123m. 12s. 10pf. First we take 10 pfennings, which is $\frac{1}{12}$ ths of a schilling, and gives 833 schillings. Then we prefix 12s., which gives 12,833 schillings, which, divided by 16, gives .802 Marcs Banco, or the decimal expression for—12 sch. 10pf. Then we prefix 6,123, and we have the whole in a decimal expression, viz. 6,123.802 Marcs Banco.

SEC. X.—FOREIGN ACCOUNTS.

RULE.—Reduce the schillings and pfennings to a decimal expression of Marcs Banco, and multiply by the price ℥ Marc Banco.

To convert dollars into Marcs Banco.

EXAMPLE.—What amount of exchange at 34 cents per Marc Banco can I buy for \$2,082.09.

Solution.—**.34**) 2082,09268 (6123,902
16

12,802
12

9.624

Ans. 6,123m. 12s. 10pf.

RULE.—Divide the dollars by the price ₹ Marc Banco.

EXCHANGE ON AMSTERDAM

is quoted at so many cents per Florin, the Florin being divided into 100 cents. Par value of the Florin in United States money 40 cents.

To convert Florins into Dollars.

EXAMPLE.—A. of Amsterdam sends me an invoice of goods amounting to 8,716³⁴/₁₀₀ Florins. What amount must I pass to his credit on my Ledger when Exchange is 41¹/₂cts. ¹⁰/₁₀₀ Florin?

$$\begin{array}{r} 8,716.34 \\ .41\frac{1}{4} \\ \hline \text{Ans. } \$3595,4902 \end{array}$$

RULE.—Multiply the Florins by the price of Florin.

To convert Dollars into Florins.

EXAMPLE.—How many Florins can I buy for \$3,595.49, Exchange at $41\frac{1}{4}$?

.4125) 3,595.49 (8,716.34 *Ans.*

RULE.—Divide the dollars by the price of Florin.

EXCHANGE ON BREMEN

is quoted at so much $\frac{3}{4}$ Rixdollar (par value 80 cents); the Rixdollar is 72 grotes, and 1 grote = 5 swares.

To convert Rixdollars of Bremen into United States dollars.

EXAMPLE.—What will it cost me for a draft on Bremen for 4,324 Rixdollars, 68 grotes, 4 swares, Exchange at $78\frac{1}{2}$ cents $\frac{1}{2}$ Rixdollar?

SEC. X.—FOREIGN ACCOUNTS.

$$\begin{array}{r}
 \text{Operation.—}\frac{1}{4}) 4.0 \\
 \underline{72)68.8} \\
 4324.955 \\
 .78\frac{1}{4} \\
 \hline
 \text{Ans. } \$3384,27728
 \end{array}$$

RULE.—Reduce the given money to a decimal expression, and multiply by the price of Rixdollar.

To reduce Dollars United States to Rixdollars it is evident we have only to reverse the operation, for example:—

$$\begin{array}{r}
 .7825) 3384,27728 \text{ (4324,955} \\
 \underline{72} \\
 1910 \\
 6685 \\
 \hline
 68,760 \\
 5 \\
 \hline
 3,800
 \end{array}$$

Ans. 4,324 R. D., 68 grotes, 4 swares.

QUESTIONS.

1. I contract a debt payable to Joseph Steele, of London, £504 19s. 3½d., exchange on that place being \$1.08½. What amount must I place to his credit in dollars?

NOTE. A foreign debt should always be converted into dollars at the current rate, so as to make your books show your actual indebtedness, which is of course what it will then cost in dollars to pay the debt. The practice of recording the pound at \$4.44 gives useless trouble.

2. I owe James Brown, London, for net proceeds of his goods sold here, \$5,987.50, which I desire to remit per bill of exchange at \$1.09½, taking ½ per cent. commission for investing. What amount of sterling can I buy?*

3. John Clarke, London, owes me \$15,341.24 for goods shipped from this port to his order, and he authorizes me to draw on him, exchange at \$1.09½. What amount of sterling must I draw for to give me the full amount of my claim with ½ per cent. for my commission?

4. Imported merchandise amounting to £324 10s. 7d. on the other side. Paid here for duties, charges, &c., \$487.34. How much per pound sterling must I sell these goods for to gain 12½ per cent., and what must I charge for an article invoiced at 3s. 6d., exchange being at \$1.09½?

5. Imported merchandise, amounting, after deducting 2½ per cent. discount, to £594 12s. 6d., exchange at \$1.10. Paid for duties, &c., on this side \$1,054.23. How much per pound sterling must I sell the goods for to gain 10 per cent.? How much must I sell an article for, charged in the invoice 7s. 6d.?

6. James Kelly, London, owes me for goods sold there on my account £129 18s. 7½d. What shall I receive in dollars in payment of the debt, when exchange is at \$1.09½?

7. John Brown, London, owes me £523 10s. 7d. What shall I realize for the debt in federal money, when exchange is at .98.

8. John Brown, London, owes me \$2,280.26, which he desires me to collect by a draft on him when exchange is at .97. I wish to know what amount of sterling I must draw a bill for so as to realize the debt with ½ per cent. commission?

9. I owe John Brown \$2,280.26 for goods sold here, which I am directed to pay by remittance. What amount of sterling must I buy so as to charge ½ per cent. commission on the amount invested, exchange at .97.

* I must charge James Brown thus—

To Cash for amount invested in Bill of Exchange	:	:	:	:	
" Commission, ½ per cent. on do.	:	:	:	:	
				=	\$5,987.50

SEC. X.—FOREIGN ACCOUNTS.

10. Sold goods for A., of Havre, net proceeds \$3,435.27, which I am to invest in a bill of exchange, at 5.27 francs per dollar. What amount of francs can I buy, taking $\frac{1}{2}$ per cent. commission on the amount invested? What would be my entry?

11. I owe B., of Hamburg, 8342 Marcs Banco, 12 schillings, 10 pfennings. What must I pay for a bill on Hamburg of that amount, when exchange is $32\frac{1}{2}$ cents per Marc Banco? What would be my entry?

12. C., of Amsterdam, owes me 10,842 $\frac{2}{3}$ florins, when exchange is $40\frac{1}{2}$ cents per florin. What amount of dollars shall I receive for a bill of that amount, and what entry shall I make?

13. D., of Bremen, owes me \$3,578.29 for goods, which I shipped to his order; I am to charge $\frac{1}{2}$ per cent. commission for negotiating the draft, exchange at $76\frac{1}{2}$ per rix dollar. What amount must the bill be drawn for, and what will my entry be?

14. D., of Bremen, shipped to my order goods amounting per invoice to 8,342 rix dollars, 25 grotes, 3 swares, for which I paid duties and charges on this side, \$879.24. How much must I charge for an article invoiced at one rix dollar, so as to gain $12\frac{1}{2}$ per cent., exchange at $78\frac{1}{2}$ cents?

15. United States 6 per cents sell in London at 102. What is the equivalent rate in New York, when exchange is \$1.09 $\frac{1}{4}$?

\$100 payable in United States sell in London for 102, by which is meant \$102, each dollar being $\frac{2}{5}$ of one pound, or 4s. 6d.; and 4s. 6d. payable in London is worth \$1.09 $\frac{1}{4}$ in New York.

16. United States 6 per cents, with two months' dividend on, sell in New York at \$111 $\frac{3}{4}$. What is their equivalent in London, exchange on that place at \$1.07 $\frac{1}{4}$? What are they worth there with dividend off?

They are worth that sum, which with $7\frac{3}{4}$ per cent. added, gives \$111.75. With dividend off, they are worth the sum which at the same premium would produce \$111.75, less the dividend.

SECTION XI.

COMPOUND INTEREST.

THE computation of compound interest is tedious, and as it is often required in the settling up of old accounts, as well as in other financial operations, we offer the following abridgment.

Multiply the principal by the number standing opposite the number of years required, the product is the amount required.

Years.	6 per cent.	7 per cent.
1	1.06	1.07
2	1.1236	1.1449
3	1.19101	1.22504
4	1.26247	1.31079
5	1.33822	1.40255
6	1.41851	1.50073
7	1.50363	1.60578
8	1.59384	1.71818
9	1.68947	1.83845
10	1.79084	1.96715

These sums are the compound interest of one dollar for the several numbers of years. In some arithmetics the table is extended to thirty years. The object of introducing it here is to show its convenience.

EXAMPLE. Required the compound interest of \$5,000 @ 7 per cent. for 7 years. \$1 at compound interest 7 years gives as above \$1.60578

5.000

\$5,000 gives 5,000 times as much, or \$8,028.90

When more years than ten are required the number corresponding is easily found. Thus for 15 years we take 10 and 5.

The number opposite 5 is for 7 per cent.	1.40255
" " " 10 " " " "	1.96715
15	

The product of these two numbers, or 2.75902

is the number answering for 15 years. For 18 years multiply the numbers opposite 10 and 8, or the number opposite 9 multiplied by itself.

The object here is merely to show the use of such tables; they will be found extended sufficiently for all purposes in McCulloch's Commercial Dictionary, under the head of "Interest and Annuities."

COMPOUND DISCOUNT.

It is sometimes required to find the present worth of a certain sum due after a certain number of years have expired. For example: in ten years I shall be entitled to receive \$15,000, what is its present worth, interest being at 7 per cent.?

By foregoing table, one dollar paid now would in ten years amount to \$1.96715. Then for every 1.96715 contained in 15,000 I am entitled to receive \$1 at present. $15,000 \div 1.96715 = \$7,625.24$, present worth.

SEC. XI.—ANNUITIES.

RULE. Divide the principal by the amount of \$1 for the time.

It will readily be perceived that this rule is applicable to all questions involving money due in prospective. Thus I have an annuity of \$500 for life, which I desire to sell for its present value at 7 per cent.; now if I determine that my expectancy of life may be estimated fairly at fifteen years, the question arises, how much would this annuity, if paid into a bank, amount to at the end of fifteen years. This being found (and we shall show the process of finding it hereafter), we have only to apply the rule for finding its present value. Those who reason superficially on these matters are apt to conclude, that because compound interest cannot by law be collected on an outstanding debt, its computation is not a practical question. With a little reflection, however, it will be obvious that a great part of the profits of all large financial institutions arises from compound interest or re-investment; the law does not say that a bank shall not re-invest what it receives for interest, in fact all banks do so six or eight times within the year; and hence one very substantial reason for preferring short paper, or notes of two months to those of eight or nine, however good the notes may be. Notes at two months, discounted at the legal interest, 7 per cent. per annum, would give the bank $7\frac{1}{2}$ per cent., the $\frac{1}{2}$ being gained by the advantage of short paper.

The law against compound interest may sometimes work injustice between partners in business, as is shown in sec. XII.

ANNUITIES.

SINCE the practice of life insurance is becoming so general, some concise and simple method of arriving at the real value of an annuity must be desirable. For example: an insurance company offer to pay at my death a certain sum, on condition that I pay annually to them \$100 so long as I live. Now estimating my life expectancy as fifteen years, how much will my payments have amounted to, for whatever they give me less than this is their profit. The following shows the amount of a \$1 annuity, from one to ten years.

ONE DOLLAR ANNUITY.*

Years.	6 per cent.	7 per cent.
1	1.00	1.00
2	2.06	2.07
3	3.1836	3.2149
4	4.37401	4.43994
5	5.63709	5.75073
6	6.97531	7.15329
7	8.39383	8.65402
8	9.89746	10.2593
9	11.49131	11.97798
10	13.18079	13.81644

Now if we require to know the amount produced at the end of seven years at 6 per cent., by an annuity of \$500, we find by the table that a \$1 annuity for that time produces \$8.39383, which $\times 500 = \$4,196.91$. Or, if we want to know the present worth of the same annuity, we must find what sum at interest for seven years would amount to \$4196.91. By the table of compound interest, we find that \$1 in seven years at 6 per cent. amounts to \$1.50363, then $4196.91 \div 1.50363 = \$2791.18$. The proof is obvious. \$2,791.18 improved at 6 per cent. interest would in seven years amount to \$4,196.91, and so would an annuity of \$500, consequently their values must be equal.

* This table is made from the previous one, as follows:—The first term of the previous table is the amount of \$1, 1 year; 2d, the amount of \$1, 2 years; 3d, amount of \$1, 3 years. Now, an annuity of one dollar, three years, is the sum of these previous terms with one dollar added.

SEC. XI.—ANNUITIES.

QUESTIONS.

1. A youth had a legacy bequeathed to him by his uncle of \$2,000, which has been improved at 6 per cent. per annum since he was twelve years old. What will it amount to when he attains the age of twenty-one, if it continues to improve at the same rate?

2. A gentleman is entitled to a legacy of \$4,000 at the death of a relative, whose* expectancy of life is seven years. What is its present worth, interest 6 per cent.?

3. A father wishes his son, who is now twelve years old, to have \$10,000 on his attaining the age of twenty-one. What sum must he now invest, so that improved at 6 per cent. it will amount to the sum required?

4. A gentleman finds that he can save annually from his income \$200, which he can improve at 6 per cent. What will his family receive at his death, should he live ten years?

5. A gentleman has \$2,636.16 to pay at the end of ten years, without interest, and wishes to appropriate annually from his income sufficient to pay the whole debt when it becomes due. How much must he pay annually, interest at 6 per cent.?

He must pay annually the annuity that will produce in ten years the sum required.

6. A gentleman is in receipt of an annuity of \$200, to cease at the death of a relative whose expectancy of life is ten years; he wishes to sell his claim to it for its present value, what sum ought he to receive interest at 6 per cent.?

7. A gentleman coming to possession of an estate, finds it encumbered with a debt of \$20,000, which he determines to pay off in seven years, interest 7 per cent. What sum must he annually apply to this purpose, so as to effect his object?

8. A father offers to invest \$500 at 6 per cent. interest, and permit his son to take the whole on these conditions, viz. the son is to draw out annually an equal sum, and to exhaust the whole in five years. How much may he draw annually?

* For tables of Expectancies see McCulloch's Commercial Dictionary, in which may be found the average duration of life for every age from 1 to 100.

As some may be curious to know how these expectancies are obtained, and as the subject is generally considered a complicated one, we offer the following as a simple method of arriving at the result.

NORTHAMPTON TABLE.

Table of Mortality, showing the Number of Persons alive at the end of every Year, from 1 to 100 Years of Age, out of 1,000 born together.

Ages.	No. of Persons.	Ages.	No. of Persons.	Ages.	No. of Persons.	Ages.	No. of Persons.	Ages.	No. of Persons.	Ages.	No. of Persons.	Ages.	No. of Persons.
1	743	16	461	31	370	45	279	59	182	73	85	87	9
2	625	17	457	32	364	46	272	60	175	74	78	88	7
3	582	18	452	33	357	47	265	61	168	75	71	89	5
4	553	19	446	34	351	48	259	62	161	76	65	90	4
5	536	20	441	35	344	49	252	63	154	77	58	91	3
6	521	21	434	36	338	50	245	64	147	78	52	92	2
7	509	22	428	37	331	51	238	65	140	79	46	93	1
8	499	23	421	38	325	52	231	66	133	80	40	94	1
9	492	24	415	39	318	53	224	67	126	81	35	95	
10	487	25	409	40	312	54	217	68	119	82	30	96	
11	483	26	402	41	305	55	210	69	113	83	25	97	
12	478	27	396	42	299	56	203	70	106	84	20	98	
13	474	28	389	43	292	57	196	71	99	85	16	99	
14	470	29	383	44	285	58	189	72	92	86	12	100	
15	465	30	376										

The total number of years of life to be enjoyed by the 1,000 born amounts to 25,678, consequently each would be entitled to 25.678 years, if the number that died each year all died at the end of the year. Assuming (what is not strictly correct, however) that the deaths of any one year would average the middle of the year, we should have to deduct half a year for every death that occurred. Then—

Total number of years to be lived 25,678
Half of 1,000 deaths to occur 500

True number of years lived $25,178 + 1000 = 25.18$ years the

expectancy of a healthy child at birth.

Then, after one year, 257 have died, leaving 743 living, and the number of years of life to these is 25,678 less 1000 = 24,678.

Then 1,000—257 leaves 743 deaths to occur, for which deduct half as before 371.5

743)24,306.5

Expectancy at the age of one year 32.71

SEC. XI.—ANNUITIES.

9. A gentleman without family or relations, possessing \$10,000, desires to purchase an annuity for life. His expectancy of life is nine years. What annuity should he receive, the rate of interest being 7 per cent.?

10. A gentleman, whose expectancy of life is nine years, wishes to secure to his family at his death the sum of \$10,000. How much should he pay annually during his life, interest at 7 per cent.?

11. A gentleman has property valued at \$10,000, which he secures at his death to his nephew, on condition that the nephew pays him annually \$500 during his lifetime. His expectancy of life is nine years. What annuity is the legacy worth, interest 7 per cent., and what is the annual profit to the nephew if the uncle live exactly nine years? What is the present worth of the legacy?

12. The debt of the city of New York, January 1st, 1849, was \$11,621,232, but as an offset they owned \$479,820. How much must be appropriated annually to pay off the debt and interest in ten years, interest at 6 per cent.?

13. A company of two hundred persons subscribe \$20,000, in shares of \$100 each, which they invest in real estate. Their property has so improved, that it now produces $10\frac{1}{4}$ per cent. per annum interest on the amount invested. What must now be given for a share, so as to realize 7 per cent. per annum?

14. I have bought the bonds of a company at such a rate that they produce me $10\frac{1}{4}$ per cent. per annum on my investment. The bonds are payable in ten years from this time. How much may be given for \$100, invested so as to realize 7 per cent. per annum?*

15. I pay \$70 for a bond of \$100, payable in ten years, and bearing interest at 6 per cent., payable annually. What profit shall I make per cent. per annum, provided I hire money for the operation at 7 per cent.?

16. A Railroad Company issues its bonds for \$250,000, payable at the end of twelve years, and bearing interest 6 per cent., payable annually.

Jacob Turnpenny, having lodged securities with a bank, and opened a credit for the entire operation, has purchased said bonds for 70 per cent. of their face, and given his check on the bank for the whole amount of their cost. He has given his note to the bank for the amount thus borrowed, which is to bear interest at 7 per cent.; and he proposes at the end of each year, after receiving his dividends, to deduct his profits, and apply the rest to the liquidation of his indebtedness. For the balance then due the bank he gives a new note in place of the old one, and so on from year to year. But the first year having nearly elapsed, he desires to know how much per cent. on his investment he is to receive for his profit.

17. How much per cent. of their face may Turupenny sell the above bonds for, so as to retain all his profits on the above operation?

* This will, no doubt, appear to the student a mere repetition of the previous question, but a little reflection will lead to a very different conclusion. According to question 13, \$100 produced \$10 $\frac{1}{4}$ per annum for ever, or, as it is termed for distinction, in *perpetuity*; but \$100 invested according to question 14 produces \$10 $\frac{1}{4}$ per annum for ten years only. It is true that if we give \$150 for \$100 at \$10 $\frac{1}{4}$, we should receive 7 per cent. for the \$150 during the ten years; but at the end we should receive back only two-thirds of our principal! and the sum we ought to give over 100 is the present worth of a ten years' annuity of \$3.50 (worth \$124.52). The present worth of this bond will every year diminish until the last, when it is 103.27.

SECTION XII.

SETTLEMENTS.

It is the usual practice when partners do business on unequal advances of capital, to credit each partner with his capital advanced; and at the end of each year, before closing the Interest account, to credit each with interest on whatever amount may have stood at his credit when the books were balanced. For example: A. and B. are partners; A. having three times as much capital as B. each has a yearly credit passed to his account for interest, thus:

Dr.	A.	Cr.
	1837.	
	Jan. 1. By capital advanced .	\$60,000
	Dec. 31. " interest current year .	4,200
	" " " profits " " .	10,000
	1838.	
	Jan. 1. " interest on \$74,200 .	5,194
Dr.	B.	Cr.
	1837.	
	Jan. 1. By capital advanced .	\$20,000
	Dec. 31. " interest current year .	1,400
	" " " profits " " .	10,000
	1838.	
	Jan. 1. " interest on \$31,400 .	2,198

Now had A. drawn out at the end of the first year \$2,800, and caused the entry to be made on the books, "Paid A. one year's interest on his surplus capital," he may have lent it back to the firm. B. has in this way no room for objection to A. drawing interest annually on his surplus capital. But let us suppose the account were left open for twelve years, A. neglecting to draw the interest on his surplus as it became due, and each partner, in the usual way of keeping the accounts, having been annually credited with interest on the amount standing at his credit when the books were balanced. Each in this way draws compound interest, and, so far as their capital is equal, it is the same for one as the other. But it makes essential difference to B. whether A. draws simple or compound interest on his surplus, for if the compound interest on the surplus is 4,000
And the simple interest 3,000

Difference 1,000

B. would gain half this difference, \$500, by a settlement at simple interest, and the law being on his side he could enforce such settlement. A. therefore loses this \$500, by merely neglecting to draw the interest on his surplus, even though the money were wanted for the business, and must have been immediately returned as a new loan. Partners thus trading on unequal advances of capital would do well to bear in mind, that in case of death their executors would be compelled to adjust their accounts at simple interest, and that all difficulty is obviated by drawing out annually the interest on the surplus.

SEC. XII.—SETTLEMENTS.

QUESTIONS.

1. William Paywell and Jno. Swift have done business as partners. William Paywell advanced on account of the business \$5,342.29, which being averaged takes date May 14th, 1849, and he received from the business \$1,224.30, averaging July 12th. John Swift advanced on account of the business \$3,824.32, averaging July 4th, and received from the business \$7,832.37, averaging August 1st. They divide profits equally, each being allowed interest on money employed. The above facts are fully agreed upon by both parties, but they are unable to make a settlement. How do accounts stand between them, or what must Swift pay Paywell, January 1st, 1849, interest 6 per cent.?

2. James Paton and Charles Collins are about to dissolve partnership, January 1st, 1849. Their affairs stand as follows: They have cash in bank \$5,679.84, bills receivable \$6,430.22, averaging due April 1st, 1849. Merchandise valued at \$14,000. They owe on their own notes \$6,000, averaging due March 1st, 1849. James Paton has advanced into the business \$12,000, taking date by average September 1st, 1848, and has drawn out \$3,840.24, taking date July 1st, 1848. Charles Collins has advanced \$4,000, taking date March 1st, 1848, and drawn out \$2,000 taking date August 1st, 1848. How much is Charles Collins entitled to receive in retiring from the business, interest computed at 6 per cent.?

5,679.84	Cash	
6,430.22	Bills Receivable	
14,000.00	Merchandise	
3,840.24	James Paton . . .	12,000.00
	Bills Payable . . .	6,000.00
2,000.00	Charles Collins . . .	4,000.00
	Profits	9,950.30
<u>\$31,950.30</u>		<u>\$31,950.30</u>

3. John and Peter bought a farm, the profits or losses arising from which they propose to divide equally, after allowing each one interest 6 per cent. on his money employed. They have sold off a part in small lots. The rest John has farmed, and they have expended money for improvements and buildings thereon. They stipulated that John's services were to be valued at \$200 per annum more than Peter's. They have been thus engaged one year, commencing January 1st, 1848. They kept no regular set of books; but each kept an accurate account of what he paid out and received, and with each other's account they are entirely satisfied. John has paid out \$5,834.22, taking date by average July 1st, and received \$2,584.20, taking date September 1st. Peter has paid out \$3,000, February 1st, and received \$284.25, taking date May 1st. They now propose to dissolve partnership, and John agrees to take the farm and improvements for \$7,500. What amount must John pay Peter in settlement? They think this can be ascertained without writing up a new set of books.

4. A banking institution having stopped payment, offers the following statement of the condition of its affairs:

Cash on hand	59,342.34	Capital	250,000.00
Bills of Exchange . .	30,000.00	Notes in circulation	487,340.00
Notes of other banks .	150,000.00	Due depositors . . .	250,000.00
Bills Receivable . . .	720,854.23	Reserved fund . . .	75,000.00
Due from other banks	12,500.00		
Expense account . . .	11,846.24		
Profit & Loss	77,797.19		
	<u>\$1,062,340.00</u>		<u>\$1,062,340.00</u>

It is estimated that the probable loss on collecting assets, and the expenses of liquidation, will be \$62,000. What then will it pay on the dollar to its stockholders?

SEC. XII.—SETTLEMENTS.

PARTNERSHIP CHANGES.

THERE is perhaps no department of book-keeping where ingenuity and forethought are of more value than in laying out a plan for liquidating an old business through the books of the new one. Although the circumstances under which these changes occur vary a good deal, the following embodies sufficient to meet all the real difficulty, in nine-tenths of such cases as the author has been consulted upon.

Let us suppose A. and B. have done business as partners, and are about to dissolve, the following being the state of their accounts :

Cash	3,750.84	Bills Payable	11,349.00
Bills Receivable . .	15,359.00	Personal Accounts . .	5,124.30
Personal Accounts . .	4,584.52	A.	19,290.56
Merchandise valued at	24,569.50	B.	12,500.00
	<u>\$48,263.86</u>		<u>\$48,263.86</u>

B. now proposes to retire, A. continuing the business, and liquidating the old partnership.

It may be proper to remark, that in this stage of the proceeding the partners themselves, when not familiar with accounts, are almost sure to clog the matter with unnecessary or unmeaning agreements. For example: B. proposes that A. shall give his note for one half the goods, that B. shall receive half the debts as they come in, and pay half the notes as they become due. Now if the agreement of partnership originally provided that each should draw interest on his account current with the firm, and take half the profits, that agreement covers the whole ground, and renders all such provisions as the above as absurd as paying a bill by telling out separately the money for each article.

If A. takes merchandise he is charged with it, as any other person would be, and the concern benefits or loses by the sale, according to the price estimated. If A. gives his note to B., then B. is charged with that note, taking date when it matures. B.'s claim, as above, is \$12,500, assuming that all profits have been posted up, and the accounts balanced; and B. must either receive from A. \$12,500 out of the present assets, with interest on his account while open, or it must be shown by A. that any deficiency resulted from a loss in which he participated. B. has no claim after the \$12,500 due at this time has been accounted for, either by money or loss.

It may be very important to A. to avoid paying B. in advance, but it must be borne in mind that B.'s account is kept open until all is liquidated; and even should he be paid at once the whole \$12,500, he would at the end be called upon to refund the interest.

Now for the entries on the old books. A. takes to account only the cash and merchandise, and the entry on old Journal is:

New Firm to Sundries.

To Cash for this amount taken to account	3,750.84
“ Merchandise for this amount on hand	24,569.50
	<u>\$28,320.34</u>

So the Old Firm have now for assets the same amount as before, but the New Firm appear as debtors, instead of Cash and Merchandise. And as all notes of the Old Firm must be liquidated, the New Firm may at once assume them; and the Old Firm next enters on its Journal:

Bills Payable to New Firm.

For Balance of this Account	\$11,340
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Now the books of the Old Firm may be left in the state they are, except charging or
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SEC. XII.—PARTNERSHIP CHANGES.

crediting an account with interest or loss, until the New Firm, say at the year's end, makes out its account current with the old.

The New Firm has on its books, then, the following entries:

Sundries to A. & B. (Old Firm).

Merchandise for goods taken to account . . . 24,569.50

Cash 3,750.84

A. & B. to Bills Payable.

For Notes of Old Firm 11,849.00

Let us now suppose a year to have elapsed, and the New Firm, which we will call A. & Co., makes out for the Old Firm the following account current:

Dr.	A. & B. IN ACCOUNT CURRENT AND INTEREST ACCOUNT WITH A. & Co.	Cr.
-----	---	-----

1848.		1848.
Jan. 19. To your notes averaging due this date . . .	11,349.00	Jan. 1. By Cash 3,750.84
Feb. 15. To amount paid on Personal accounts with int. thereon . . .	5,311.54	“ “ “ Merchandise . . . 24,569.50
June 1. To Amount paid B. on acct. by our note, due this date . . .	10,000.00	Feb. 28. “ Notes collected aver'g this date . . . 15,369.00
Dec. 31. To Interest to date on debit	1,268.49	May 1. “ Accts. collected . . . 3,500.00
“ “ To New Account . . .	21,865.08	Dec. 31. “ Int. to date on Cr. . . 2,614.77
	\$49,794.11	\$49,794.11

Personal Accounts paid	5,124.30
Interest thereon	187.24
Amount charged as above	\$5,311.54
Personal Accounts received	4,584.52
Interest thereon	150.00
	4,734.52
Loss	1,234.52
Amount received and credited above	\$3,500.00

Now we make from this document the proper entries in the old books:

Sundries to New Firm.

Personal Accounts for this amount paid . . . 5,311.54

B. for amount paid him on account . . . 10,000.00

Interest for this amount due them on above payments 1,268.49

\$16,580.03

Interest to Personal Accounts.

For this amount due on sundry accounts at settlement . . . \$187.24

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New Firm to Sundries.

To Bills Receivable, notes collected	15,359.00
" Personal Accounts, amount collected	3,500.00
" Interest	2,614.77
	<hr/>
	\$21,473.77
	<hr/>

Personal Accounts to Interest.

For interest due at settlement	\$150.00
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Profit & Loss to Personal Accounts.

For this amount lost	\$1,234.52
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The accounts of Old Firm on old books now stand thus:—

	Cash	balanced.	
	Bills Receivable	"	
	" Payable	"	
	Personal Accounts	"	
10,000.00	B		12,500.00
	A		19,290.56
21,865.08	New Firm		
1,455.73	Interest		2,764.77
1,234.52	Profit and Loss		
			<hr/>
\$34,555.33			\$34,555.33
			<hr/>

We now add the following Journal entries—

Interest to Profit & Loss.

For balance of this account	\$1,309.04
---------------------------------------	------------

Profit & Loss to Sundries.

To A.	\$37.26
" B.	37.26
	<hr/>
	\$74.52
	<hr/>

And now the open accounts are—

21,865.08	New Firm	
10,000.00	B	12,537.26
	A	19,327.82
		<hr/>
\$31,865.08		\$31,865.08
		<hr/>

B now draws out the balance of his account, which the new firm pays and enters on its books.

A & B to Cash.

Paid B his claim on Old Firm in full	\$2,537.26
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We also enter on old books—

B to New Firm.

For balance of his account	\$2,537.26
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SEC. XII.—PARTNERSHIP CHANGES.

To close the old Ledger we have only to enter—

A to New Firm.

For his interest transferred to New Books	\$19,327.82
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On New Books the account with Old Firm stands thus—

A & B.

To Cash paid B 2,537.26	By Bal. of old account . 21,865.08
“ Bal. to A’s credit 19,327.62	
\$21,865.08	\$21,865.08

On the Journal of the New Books—

A & B to A.

For bal. transferred to his credit, being his capital brought from Old Firm, \$19,327.82

Thus the whole is liquidated, and interest has been adjusted on all matters of account with the Old Firm, and A. stands credited in the New Books with his claim on the concern.

So far we have given only an outline; we will add a few entries to exemplify the process of carrying it out in the New Books.

The New Firm pay a note of the Old Firm	\$1,000
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ENTRY.—*Bills Payable to Cash.*

For John Doe’s note to Old Firm due this day	\$1,000
--	---------

NOTE.—The Bills Payable were taken to account, and are therefore treated in every respect as their own Notes.

They receive Cash for a Note due Old Firm, \$2,500.

ENTRY.—*Cash to A & B (Old Firm).*

For Richard Roe’s note	\$2,500
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NOTE.—The Notes Receivable were not taken to account, and are therefore credited to Old Firm.

They receive \$800 in compromise of a note of Old Firm.

ENTRY.—*Cash to A & B.*

For Thomas Carpenter’s Note of	\$1,500	
Less loss	700	\$800

NOTE.—This loss may at any time be entered on books of Old Firm, thus:

Profit & Loss to Bills Receivable.

They receive a debt from G, \$1,526.50.

ENTRY.—*Cash to A & B.*

For Balance due from G. on old books	1500.00	
Interest to date	26.50	
		\$1,526.50

NOTE.—An entry would now be made on Old Books.

G. to Interest	\$26.50
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SEC. XII.—SINGLE ENTRY.

The New Firm has obtained money by having sold some of the Old Firm's notes.

Cash received	5,350
Discount	80.25
	\$5,430.25

ENTRY.—*Cash to A & B.*

For Notes of the Old Firm discounted, averaging due April 12th . \$5,430.25

Interest to Cash.

For 3 mos. discount on Old Firm's notes \$80.25

They pay expenses for business of Old Firm.

ENTRY.—*A & B to Cash.*

For expenses on, &c.

These will be found to comprehend most of the entries required, and to one who has mastered the subject properly there cannot be the least difficulty in carrying out the plan; but to such as have not studied accounts, and have merely picked up a little of the routine of some one set of books, we can only say, if this explanation appears complicated and unintelligible, it will become perfectly plain by studying the book from the beginning. This is a part of the subject that can only be made clear and simple to those properly instructed.

SINGLE ENTRY ACCOUNTS.

As the question will doubtless be asked why we have introduced Single Entry after Double, it will be proper to give our reason for it. We admit that books may be kept by single entry by those unacquainted with the principles of double entry, but the mere keeping of accounts is not all that is required. The simplest settlement of Partnership accounts involves the principles of double entry, and when the commonest English education includes a knowledge of Arithmetic, Mensuration, and often Algebra and Geometry, it surely ought to include a knowledge of accounts sufficient to make a partnership settlement between two mechanics. Is it not a pitiful position for a youth who can compute to a fraction the value of a life annuity, or perhaps even the orbit of a comet, to be compelled to acknowledge his entire incompetency to effect a settlement between John Doe, the farmer, and Richard Roe, the miller, in a matter of some few hundreds of dollars?

We think it will soon be deemed as essential that a youth should understand accounts as that he should have studied Grammar or Geography, or any other useful branch of knowledge, and that Arithmetic with single entry to help it does not suffice to secure this knowledge, will be readily admitted on reference to the few simple questions under the head "SETTLEMENTS."

If these reasons, then, justify us in assuming that the principles of double entry should be taught to all, the time spent in writing up single entry accounts is wasted; it is something like learning architecture by beginning with a hog-pen. Single entry can be adopted at once by one acquainted with the principles of double.

Single entry, according to the popular understanding of it, is a mere record of personal indebtedness, but it may also include the accounts of Cash, Bills Receivable, and Bills Payable. The three latter accounts, however, are seldom posted to the Ledger. The Cash is entered on a Cash Book, and is thus a substitute for the Ledger account, and a Bill Book answers the same purpose as Bills Receivable and Bills Payable accounts, but the secondary accounts are all dispensed with.

Single entry is practised under as great a variety of forms as double. A professional man would be satisfied with having accounts that would simply show who was indebted to him, and whom he owed. A Ledger would therefore be the only book he would need. It should have an alphabetical index, so that he could turn to any person's account, and charge or credit him as the case may require. The best size is a small octavo volume; the left hand

SEC. XII.—SINGLE ENTRY.

page being taken for the Debit side of the Account, and the right for the Credit, so as to give room for entering particulars. Those who are more methodical will keep also a small Cash Book, in which they will record every sum of cash received and paid. It shows how money is gone out, and for what purpose ; and if necessary or desirable, an inside column on the Credit side may be made to show any particular class of expenses.

A small retail dealer, or tradesman, would find it requisite to keep a Day Book, in which he would make his entries before passing them to the Ledger. For example :

NEW YORK, JANUARY 1ST, 1849.

Ledger fol.	2	John Franklin, Dr.,						
		For 1 pair pants	.	.	.	.	7.00	
		" 1 coat	.	.	.	.	22.00	29 00
						2d.		
	6	James Coleman, Cr.,						
		For 12 yards Super. Black Cassimere @ \$2					24.00	
		" 20 " " " Cloth @ \$5					100.00	124 00

These are posted to their proper accounts in the Ledger, and the cash received or paid on account is either posted from the Cash Book or first entered on the Day Book.

A farmer should keep accounts of some kind. Few, however, would be at the trouble of keeping more than a Cash account and Ledger ; but one who has acquired at school as much knowledge of the principles of accounts as is comprised in the previous exercises in this book, will have no difficulty in adopting such a course as answers his purposes ; he cannot fail to see the advantage of sometimes introducing on his Ledger an account of some particular class of expenditures, with the proceeds, so that he may arrive at the result, whether profit or loss. He may cultivate a field, for example, on some particular plan, and would therefore introduce on his Ledger an account of that field, with the outlay on the Debit side and sales on the Credit.

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